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BENJAMIN C. WOODBURY, M.D.

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finished; covers *Acacia* through
Asclepias tuberosa; concludes
mid-word ("expec-") on p. 768.

Dr. Hainby

THE ELEMENTS

OF A

NEW MATERIA MEDICA

AND

THERAPEUTICS.

*Based upon an entirely New Collection of Drug-Provings and Clinical
Experience.*

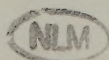
BY

E. E. MARCY, M.D., J. C. PETERS, M.D. & OTTO FÜLLGRAFF, M.D.

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INTRODUCTION.

IN presenting to the profession the commencement of a new work on *Materia Medica*, the editors are actuated by a desire to accomplish the responsible task in such a manner as to save the practitioner much time and study in the selection of appropriate medicines for different groups of symptoms, and of placing before him such only as are specific and reliable.

Taking into consideration the limited knowledge we possess with regard to many drugs, we are aware of the difficulties to be encountered, and the immense research and labor it will require to carry out properly the duty we have undertaken. But with the aid of the Great Healer, and by dint of the industry and energy with which the good cause shall inspire us, the ideas we have conceived with regard to this important subject shall be fully carried out.

The usual classification of the different organs of the body adopted by our School will be retained; but in the selection of drug-symptoms, such only will be received as are positive and unquestionable. In making this selection we shall require

First, that every symptom shall have been experienced by several different provers.

Second, that the pathological changes induced by the drug shall correspond with its pathogenetic phenomena, and be recorded directly under each organ.

Third, that the drug shall have repeatedly cured morbid symptoms, similar to those recorded in its pathogenesis.

It will be our object to place before the reader the actual genius of each medicine, and to expose not only drug-phenomena which have been felt and seen, but those which are often latent and unappreciated. We shall endeavor to trace all phenomena to their causes, and thus to reach those hidden springs which so often induce discord and disease throughout the entire organism.

It is only through pathology and physiology that this desirable end can be attained. To prove this position we cite two examples.

It is well known that an inflammation or irritation of a certain portion of the cerebellum, will give rise to erections of the penis. It is also true that a mere local irritation of the erector muscles, and of the contiguous parts will also cause erections precisely similar in all respects to the first. Now Opium and Cannabis-indica induce erections by exercising their specific

action upon the tubercula quadrigemina and the neighboring parts of the brain, while Cantharides produces erections by its specific influence over the parts connected with the erectile muscles.

In the first instance cited, Opium or Cannabis would be homœopathic, while in the other instance Cantharides is the true specific.

If we examine the pathogenesis of *Arsenicum* and *Colchicum* we shall observe that both produce dropsical swellings in various parts of the body. In both instances the visible and appreciable symptoms are the same, and if we are unable to trace out the genius of these remedies beyond this point, it would be a matter of indifference which should be prescribed to arrest the dropsical effusion.

But pathology teaches us that *Arsenicum* causes dropsy by impairing the integrity of the spinal marrow, and the ganglionic and capillary nerves, while *Colchicum* produces the same symptoms in virtue of its specific influence over the kidneys and bowels.

Now let us suppose a case of Bright's disease. The patient presents himself with œdema of the legs, and an occasional puffiness of the face, but with no other pains, no other visible symptoms. An analysis of his urine, however, gives us *albumen*, and we diagnose *granulated kidney* as the cause of the œdematous condition. In this instance pathology alone can reveal the hidden and deep-seated action of those drugs, and thus enable us to select the one which is actually homœopathic to the disease.

These distinctions are important; but without the aid of pathology and physiology we could have no certain appreciation of them.

Under each separate organ will also be recorded clinical facts from all sources, for the purpose of illustrating practically the curative sphere of each remedy. In making up this portion of our work, we shall draw upon the experience of reputable physicians in all parts of the world. By this course the practitioner obtains at a glance the therapeutic sphere of each medicine, and is able to compare critically all its pathogenetic, pathological, physiological and curative relations.

Each number of the Journal will contain from fifty to one hundred pages of the work in the form of an appendix, and the matter will be paged independently, so that at the expiration of each year it can be bound into a handsome octavo volume of about 300 pages.

With these few explanatory observations we enter upon our arduous work.

NEW MATERIA MEDICA.

ACACIA.

GUM ARABIC.

AUTHORITIES.

Waring's Therapeutics (44). Dierbach's Mat. Med. (16). Pereira's Mat. Med. (13). Peters (11).

Clinical Remarks.—In *coughs* much relief is often experienced from allowing a piece of gum-arabic to dissolve slowly in the mouth. It is particularly useful in allaying the irritation of the throat which excites cough in Phthisis (44). I have found it as useful and curative in consumption as cod liver oil, and far more agreeable, but it must be taken in large quantities; at least from two to four ounces per day, and followed up for months; the warm solution of one ounce of gum to half a pint of water, is the best preparation. (11).

In *Ardor urinæ*, and *Calculous affections* the mucilage proves of great service. Prof. Graham also thinks that the Gum may be employed as an article of diet for diabetic patients, without risk of increasing the sugar discharged in the urine. (44).

Its use as a palliation in acute and chronic gastritis and colitis, and diarrhœa is well known.

In *Hæmorrhage*, the local application of finely powdered gum is often effectual in arresting the flow of blood especially from leech bites; severe *epistaxis* has been successfully treated by finely powdered gum blown into the nostril. (44.) In uterine hæmorrhage a somewhat similar procedure may be used; or a strong mucilage injected; or cloths or lint saturated with it introduced into the vagina. (11.)

In *Burns and Scalds*.—Mr. Rhind of Edinburgh advises applying a thick solution of Gum-Arabic over the burnt surface. He states that it relieves the pain almost instantly, and that under its use the healing process appears to be hastened. He adds that repeated trials for several years and strict observation confirm him as to the value of the treatment. (44).

In *Sore Nipples*.—Erasmus Wilson speaks of the mucilage of Acacia as a useful application. He directs it to be pencilled on the tender part immediately after nursing, and the nipple to be protected with a shield. He also speaks favorably of the application of a powder composed of equal parts of Gum-Arabic, and Borax. (44). But by far the most useful application is the Tincture of Benzoin, applied with a camel's hair brush. It need not be washed off again before nursing. (11).

ACIDUM ACETICUM.

ACETIC ACID.

AUTHORITIES.

Orfila (2.) Pereira El. of Mat. Med. Vol. 1. P. 351. (3.) Parrot. (40.) Beyer. (41.) Ottinger. (42.) Klusemann. (43.) Waring's Therapeutics. (44.) Vogt's Materia Medica (20.) Marcy (10.) Peters (11.)

PHENOMENA.

Intellect.—Confusion of ideas; disinclination to exert the mind; slight and transient delirium; diminished intellectual power. (2.)

Clinical Remarks.—It has proved curative in mania with cerebral excitement; delirium caused by opium; delirium of typhus; alternate stupor and delirium of typhus.

Disposition.—Irritability of temper; nervous and excitable mood. (2.)

Head.—Giddiness; dull pains in the forehead and vertex; shooting pains through the temples; heaviness of the head with sense of intoxication; indications of vascular excitement in the brain; distention of the temporal blood vessels, with increased heat of the head. (2.)

Clinical Remarks.—It has proved curative of hæmorrhage of the nose, arising from determination of blood to the head—(used locally as well as internally); headaches from abuse of stimulants, tobacco, coffee and opium; affections of the brain dependent on nervous congestion. (3.)

Scalp.—**Clinical Remarks.**—In Tinea capitis, the local application of the strong acid is recommended by Wigan. The first application is with the acid, diluted with three times its weight of water. On being applied, a number of spots previously looking healthy, become red patches; then, with a piece of sponge tied to the end of a stick, each spot is to be saturated thoroughly with the strong acid for three or four minutes. A single application is sufficient in the majority of cases. A crust grows up with the hair, which may be removed as soon as a pair of fine scissors can be introduced beneath it. Erasmus Wilson speaks favorably of a similar mode of treatment repeated once a week.

Eye.—**Clinical Remarks.**—Particles of Lime in the eye are effectually dissolved and the pain eased, by bathing the eye into diluted vinegar. (11.)

Face.—Face pale and waxen; eyes sunken and surrounded by a dark circle. (44.)

Throat.—**Clinical Remarks.**—The sore-throat of scarlet fever is much benefitted by the application of the steam of warm vinegar; in quinsy, and almost every form of ulcerated or relaxed sore-throat much relief is obtained by inhaling the vapor of hot vinegar and water.

Appetite and Taste.—Diminished appetite; tongue pale and flabby; adipsia; vomiting soon after eating. (41.)

Stomach.—When taken daily in its diluted form, and in large doses, it produces great uneasiness, cramps and colic, and gradually destroys so effectually the texture of the stomach, and its digestive functions, as to cause emaciation of the body. (20.)

Clinical Remarks.—Dr. Tracy's (of Ohio) experience with the vegetable acids as correctives of acidity of the stomach has been considerable; he has prescribed them in a large number of cases, and nearly all with decided benefit. Dr. Tracy himself was subject to repeated and severe attacks of Conjunctivitis, accompanied with acidity of the stomach, which he had attempted to correct by the early and free use of soda, but in vain. He had for months abstained from the use of acids, but was finally induced to take a glass of lemonade, with great alleviation. The remedy was again and again repeated, and the threatened ophthalmic attacks effectually prevented. Dr. Tracy has found vegetable acids uniformly and entirely successful in removing the disposition to attacks of acidity of stomach in persons subject to them; and his impression is that in all such cases they can be relied upon with more confidence than any other remedies. In cases of acidity from pregnancy he has found the sub-acid fruit of great service, while those that were tart could not be borne, and mineral acids were decidedly injurious, while the whole range of alkalies and absorbents were of little or no avail. *Braithwaite* says this may seem a very unscientific (but very homœopathic) mode of procedure, still facts seem to corroborate the value of the practice in some cases. Dr. Chapman of Philadelphia experienced relief from the same remedy. The late Professor Wiston had for a long time ineffectually endeavored to relieve an opulent merchant of acidity of the stomach, who was very speedily cured by drinking of sour beer. Dr. Chapman had a most distressing case, which proved utterly intractable during nearly a whole winter, to the regular alkaline remedies, which was cured promptly during the summer, by the patient subsisting on the sour pie-cherry. Nor is this the only instance in which Dr. Chapman has heard of cures ascribed to tart and perhaps unripe fruit of several kinds, and one especially from Professor Hodges, to sour or unripe apples; he also attended a case with Dr. J. Rhea Barton, which yielded immediately to wheaten mush and vinegar, largely and eagerly consumed.

Abdomen.—Gripping pain in the bowels; diarrhœa; tympanitis, with difficulty of breathing (from large doses) rumbling in the abdomen. (42.)

Clinical Remarks.—Dr. Parrot has treated successfully, diarrhœa accompanying typhus fever with diluted vinegar; also diarrhœa with pain in the gastric region, rumbling, and delirium; also, constipation with tympanitic abdomen and stupor; also gripping pains in the abdomen of several years' standing, with difficulty of breathing, sleep-

lessness, vomiting after every meal, impaired sight, and irritable mood; also six cases of ascites following intermittent and scarlet fevers, (cured in three to four weeks by drachm doses). (40.)

Stool.—Watery diarrhœa; diarrhœa, with colic pains, and tenderness of the abdomen to the touch; bloody discharges from the bowels. (42.)

Clinical Remarks.—In a paper read before the Epidemicological Society of London, Dr. J. H. Tucker begins by alluding to the remarkable, but well established fact, that in 1849, the cider districts of Herefordshire, Somersetshire, and part of Devonshire were to a great extent, exempt from the ravages of Cholera, while the disease was raging around. Upon farther inquiry it was ascertained that this exemption was confined a good deal to those individuals who drank cider as a common beverage, and that those who partook of malt liquor occasionally suffered. He also remarks that in some parts of France and Normandy, more particularly where cider is the common beverage, cholera is seldom known to exist. TUCKER also expresses the opinion that other vegetable acids will be found of service, such as lemon juice, (but lemonade often causes griping and diarrhœa,) orange juice, and sour wines made from grapes. As it would be quite impossible to supply the world with a sufficient quantity of pure cider, he suggests that *Vinegar* might be found a useful substitute in case of another outbreak of Cholera. He then proceeds to show that acid drinks were not only preventive, but remedial in epidemic disorders of the bowels. Cases are related, in which not only were persons exempt from attacks of cholera raging around them, who drank freely of cider, but a case of severe cholera is also related, which yielded to the diluted juice of sour apples. He also refers to some established facts connected with the spread of epidemic dysentery in the army, showing the efficacy of vegetable acids in that disease.

Urine.—Urine increased in quantity, and of a lighter color. (3.)

Uterus.—*Clinical Remarks.*—In uterine hæmorrhages the application of cold vinegar and water to the pubes is not only agreeable, but tends considerably to arrest the discharge of blood. (11.)

Larynx, Trachea, and Chest.—Irritation of the windpipe and chest; dry cough attended with oppressed respiration, succeeded by a moist cough with fever, increased difficulty of breathing, emaciation, night sweats, œdema of the feet and legs, diarrhœa and death; Klusemann reports three cases of hæmoptysis caused by the use of Acetic-acid in from one to four weeks. (43.)

Clinical Remarks.—Vinegar, much diluted with water, has often checked night sweats, bronchial hæmorrhages, and diarrhœa from hectic fever. Kopperstatter, Oettinger and others have cured several cases of hydrothorax by the use of vinegar in drachm doses in from two to six weeks. (10.)

In *phthisis* the value of the external application of diluted vinegar to the chest and upper part of the body, in allaying the profuse perspirations, is well known; it is a measure attended with salutary effects, and is of great comfort to the patient. The mixture employed by Sir C. Scudamore for this purpose, is composed of one pint of vinegar, one of cologne water, and two of water. Alcohol or spirits and water is often more useful than vinegar. Dr. Roberts strongly advocates both the internal and external use of vinegar for checking the hectic and night sweats, restraining hæmoptysis and producing costiveness. As a preventive of *phthisis* Dr. Graves speaks favorably of washing the chest with vinegar and water, beginning with it tepid, and reducing the temperature gradually until it can be used cold.

In *hæmoptysis* the internal and external use of vinegar was highly esteemed by the ancients; Cælius Aurelianus, Avicenna and Rhases are among its chief advocates.

In *Asthenia* and *Angina-pectoris* it is of great importance to diminish the susceptibility of the patient to cold; one of the most effectual means of effecting this is to bathe the chest with vinegar and water. It is a measure fraught with benefit also to those who are liable to continual *catarrhal attacks*. (11.)

Breasts.—*Clinical Remarks.*—To milk or mammary abscesses, the application of warm vinegar is stated by Dr. Dewees to be so successful in the early stage of the disease, that we need not in general look for any other remedy. It is he states, particularly useful, when the breasts are greatly and painfully distended with milk; it should be perseveringly employed for twenty-four hours. This testimony in favor of it is very strong.

Upper-Extremities.—Diminished muscular power of the arms and hands; paralytic sensation in the wrists and hands; coldness and prickling in the hands. (2.)

Lower-Extremities.—Œdemateous swelling of the feet and legs; impaired muscular power of the legs; diminished sensibility of the feet; coldness of the feet. (41.)

Fever.—Hectic fever, with emaciation, cough, night sweats, diarrhœa, dispnœa, and dropsical swelling of the feet and legs; typhus fever, with violent delirium, diarrhœa, pain in the abdomen, rumbling in the gastric region; also typhus with stupor, tympanitic abdomen, and obstinate constipation. (2.) (44.)

Clinical Remarks.—Diluted Acetic-acid has been employed as a remedy in abdominal typhus for centuries. Numerous cures are reported by this agent; but in these instances, it is probable that the credit rightfully belongs to the *vis medicatrix naturæ*. As a cooling beverage, to allay thirst, diminish heat, and dilute the irritating secretions of the digestive canal, it is doubtless a remedy of some value. (10.)

Skin.—Skin pale and waxen; general anasarca; diminished sensi-

bility of the surface of the body; temperature of the skin below the natural standard. (2.)

Clinical Remarks.—As an external application vinegar has been used with success to allay the intense itching and burning of eczema. Oettinger cured several cases of chronic eruptive disease, resembling lichen, by the internal and external use of this remedy. The refrigerant influence of diluted vinegar on the surface is undoubted; it not only diminishes heat, but allays pain. (10.)

In *Scarlatina*, dilute Acetic-acid internally, has been strongly recommended by Dr. Isaac Brown. He considers that it is more efficacious than any other treatment, and that it tends to prevent the occurrence of dropsy. Dr. Webster relates four cases, in which it appeared to him conclusive that sponging the body of the patient prevented the spread of the disease beyond the original patient.

In *Psoriasis*, Dr. Cummin states that his trials with strong Acetic-acid have been highly satisfactory; the diseased cuticle separating in flakes, and a new surface being exposed, of a much more healthy character. The application of the acid is hot and painful, especially when there are excoriations and fissures; but these should be protected by Glycerine, or Simple-cerate. The acid requires, in most cases, to be repeated two or three times. In obstinate cases of lepra much benefit has been derived from the use of baths acidulated with Acetic-acid. (11.)

Nævus Maternus.—Dr. Behrend of Berlin advises in the case of the small flat nævi, the application of strong Acetic-acid; under this treatment the blood is made to coagulate in its vessels, the nævus becomes hard and yellow, and is thrown off in the form of a parchment-like layer. In obstinate cases the Muriate Tincture of Iron, or a slight application of strong Nitric-acid may be used.

Warts and Moles may be removed effectually by the application of the strong acid. The warts should be first carefully pared down, and the acid should then be applied with a camel's hair brush. Large moles may be touched lightly with strong Nitric-acid, a wet rag may be applied at once to prevent the acid from burning too deep, and subsequently the mole may be touched every day or two with Acetic-acid. I have found this mode of treatment very successful. (11.)

Cancer.—Acetic-acid is the only known agent which dissolves the true cancer cells; it may be used freely internally and externally.

Burns and Scalds.—Cleghorn of Edinburgh recommends the immediate application of vinegar to the burnt surface, to be continued until the pain abates, and when this returned the application was repeated.

In *Purpura*, whether attended by fever, or of a torpid character, Erasmus Wilson advises sponging the body with tepid vinegar and water.

In *Hospital Gangrene*, when of a mild character, Delpech speaks highly of the topical application of Acetic-acid and Vinegar. The ulcerations having been previously cleansed, are to be washed with

strong vinegar, and then covered with charpie wet with the same liquid. If this fails caustics must be used.

Vinegar in Itch.—Professor Le Coeur of Caen, recommends for the cure of Itch, forcible frictions of the parts affected, with a hard sponge, soaked in good vinegar, thrice daily so as so penetrate the skin and rupture the vesicles. He has tried this treatment with the most complete success in ten cases, the average length of the treatment being less than five days. He thinks this treatment preferable to all others on account of its speedy action, its inexpensive nature, its freedom from all unpleasant odors, and its easy application. He suggests that similar results might be obtained by frictions with the mineral acids diluted with water.

General Symptoms.—Febrile symptoms accompanying typhus hectic fever; dropsical affections arising from loss of blood, diarrhœa or functional derangements; hæmorrhages from the nose, lungs, and stomach; local eruptions, of an itching and burning character; determination of blood to the head, with delirium, convulsive movements, and severe pains in the head.

Only one fatal case of poisoning by the internal use of Acetic-acid is recorded. In this case, the patient (a girl) “appeared to be intoxicated, suffered acute pain, and was violently convulsed.” (*Orfila*). No *post-mortem* examination was made.

ACIDUM BENZOICUM.

BENZOIC ACID.

AUTHORITIES.

Jeanes’ American provings. (30.) Waring’s Therapeutics. (44.) Peters. (11.) North-American Journal of Homœopathy, Vol. 3. (7.) Dierbach’s Mat. Med. (6.)

Sleep.—The experimenter awakened after midnight with violent pulsations of the heart and temporal arteries (pulse 110 in a minute) without external heat; and could not fall asleep again. In the morning his tongue was covered with a white mucous coat and he had nausea, and total loss of appetite. In the afternoon at four o’clock all the symptoms had vanished. He awoke every morning about two o’clock, with strong internal heat, and a hard, bounding, but not quickened pulse; he had to lie awake upon his back, because the pulsations of the temporal arteries caused a puffing sound in his ears, and prevented him from going to sleep again (for eight weeks). (30.)

Head.—Confusion of the head with drowsiness.

Pressure in the temples, in the region of constructiveness.

Pressure on the whole of the upper part of the head and spinal co-

lumn, as if these were pressed together by an elastic body, so that he bent himself involuntarily, and stretched forwards. This sensation without being painful, is productive of extraordinary anxiety (occurring two days in succession whilst sitting.) Itching on the scalp. (30.)

Eyes.—Itching in the angles of the eyes. (30.)

Nose.—Sensation of irritation in the left nostril, such as precedes sneezing, yet without being obliged to sneeze.

Slight transitory hoarseness and repeated sneezing, in the morning, with a pleasant excitement and freedom of the head, which, together with its more rapid disappearance, sufficed to distinguish it from the ordinary symptoms of taking cold. (30.)

Ears.—Itching in the left ear.

Shooting pain in the right ear, intermitting. (30.)

Teeth.—Slight cutting pain in the teeth. Darting pain in carious molars in both jaws. (30.)

Clinical Remarks.—Cotton, well moistened with Tinct.-Benzoin is a capital application to aching and carious teeth. (11.)

Mouth.—Soreness of the back part of the tongue, felt most while swallowing. Sensation of soreness and rawness at the root of the tongue, and on the palate. Extensive ulcerations of the tongue with deeply chapped, or fungoid surfaces. An ulcerated tumor in the left side of the mouth upon the soft commissure of the jaws behind the last molar-teeth. (30.)

Clinical Remarks.—Benzoin must prove as useful in ulcerations of the mouth, as it does in many more external ulcerations. (11.)

Throat.—Heat in the œsophagus, as from acid eructation. (30.)

Clinical Remarks.—In two cases, in females, both for a long time subject to violent *Angina*, in neither of whom the allopathic treatment had ever succeeded in preventing suppuration, though early and energetically applied, and where, in the case of the daughter, homœopathic treatment with *Belladonna* and other apparently indicated remedies had twice failed to prevent suppuration, although it diminished the suffering much more than any previous treatment, Benzoic-acid in alternation with *Belladonna* and *Digitalis* would speedily subdue the attacks, and finally seemed to effect such an alteration of the system that the tendency to this form of disease appeared to be almost extinguished. (30.)

Stomach.—Singultus. Sensation of heat throughout the abdomen. Pain in the left side of the abdomen immediately below the short ribs. (30.)

Clinical Remarks.—In *Pyrosis*, the late Dr. Baillie was in the habit of employing the compound tincture; and generally found it efficacious; Dr. Symonds also bears testimony to the value of this treatment. (44.)

Bowels.—Bowels freely open with extraordinary pressure to stool;

fætid, watery, white stools, very copious and exhausting in infants, the urine being of very deep red color. (30.)

Clinical Remarks.—In cases of diarrhœa in infants, where the stools are very copious, watery, very light colored and fætid, and where the urine is of an uncommonly deep red color, and its urinous odor remarkably strong, I have found Benzoic-acid produce very great improvement. (30.)

In *constipation* apparently depending upon stricture of the colon, Drs. Hastings and Streeten state that the compound tincture of Benzoin will keep up the peristaltic action, without irritating the bowels; as there is a mechanical obstacle to overcome, comparatively large doses are required, but twenty drops, 3 times a day, will generally keep the bowels active and regular. (44.)

Urine.—Irritability of the bladder; too frequent desire to evacuate the bladder, the urine being normal in appearance. Urine at first only increased in quantity, not in frequency, but in a few days urination became exceedingly frequent, with strong pressing; urine of an aromatic odor, and saline taste; the odor being long retained and most marked in the forenoon; urine highly colored, sometimes of the color of brandy, the urinous odor being exceedingly strong; urine of the above character, of a specific gravity greater than that of healthy urine when passed into the same vessel, assumed and retained its place below the healthy urine without mixing with it; and though of a very deep red color, it deposited no sediment; hot scalding urine of a deep red color and strong odor, causing so much suffering in its passage, that the patient made water but once a day. (30.)

Clinical Remarks.—Dr. Jeanes of Philadelphia says: I have found the Benzoic-acid of great utility in a number of cases where the *urine* was of a deep red color, sometimes even as dark as brandy, and its urinous odor peculiarly strong. This highly colored and strongly scented urine occurs most frequently in syphilitic cases; where the external symptoms have been either wholly or partially suppressed by improper treatment; also in some cases after infection, but before the establishment of chancre or syphilitic gonorrhœa; and sometimes accompanies these disorders. It is often so strongly marked as to attract the attention of the patient sufficiently to induce him to remark it to the physician. (30.)

Case: A gentleman, aged 37, had the following symptoms: whitish deposit in the urine, forming a hard grey crust, very difficult to remove, of offensive and strongly ammoniacal odor; specific gravity 1023; without albumen; the patient's appetite was good, tongue clean, and he slept well; but was pale, complaining of general lassitude and languor, and a sense of weakness across the loins; his bowels were generally confined. By the use of Benzoic-acid he was completely restored. (30.)

Dr. Williamson of Philadelphia reports a case of *Nephritic Colic* in a man subject to it. The *Urine* was extremely high colored and

strongly scented; the Benzoic-acid afforded great relief in a paroxysm which occurred two years ago, since which time he has not had his usual returns of the complaint. (30.)

In *irritable states of the bladder*, Dr. Prout derived much benefit from the Tinct.-Benzoin. It should be given, he observes, in small doses largely diluted, and persevered in for a long time. Dr. Soden of Bath relates four cases successfully treated with it. Dr. Garrod found that he could produce a very acid state of the urine with Benzoic-acid, enabling the urine to hold in solution a large amount of phosphatic salts. He used it in a case of paraplegia where the urine was highly alkaline, and deposited a large amount of phosphates; under the use of Benzoic-acid, four times a day, the phosphatic deposits soon became lessened, and in a few days entirely ceased, and did not return when the medicine was omitted. (44.)

In *incontinence of urine in children*, Dr. Delcom relates two cases successfully treated with Benzoic-acid, when many other remedies had failed. (44.) Drs. Metcalf, Chapman and Fraene have used it with great benefit. (N. A. Journ. Hom. Vol. 3., p. 334.)

Sexual Organs.—A thrilling almost painful sensation on the left side of the glans-penis, extending into the urethra, so severe as to occasion starting, ending in a sensation of tickling and itching.

Itching in the sulcus behind the corona glandis.

Smarting of the frænum præputii. (30.)

Clinical Remarks.—In *Pruritus Scroti*.—Erasmus Wilson states that pencilling the parts with the tincture will be found useful. (44.)

Larynx.—Sneezing, with slight hoarseness, without accompanying catarrhal symptoms.

Troublesome, and almost constant, dry hacking cough. (30.)

The powder of Benzoin introduced into the nose, readily causes sneezing; the vapors of Benzoic-acid cause violent coughing. According to Schreiber, if taken internally in large doses, it causes a long-continued scratching sensation in the throat, increased warmth of the body, quickness of the pulse, followed by profuse sweat, attended with dulness of the head and copious expectoration. Benzoic-acid will then also be found in the urine. (11.)

Clinical Remarks.—It is supposed to act specifically upon the mucous membranes, especially the pharyngeal, laryngeal and bronchial; the vapor sometimes causes great irritation of the air-passages; still it is recommended by Dr. Cheyne in strumous laryngitis, and by Trousseau and Pidoux in chronic laryngitis and chronic catarrhs; they advise the air of the patient's apartments to be impregnated with the vapor of Benzoin, the drug being thrown upon burning coals, or it may be inhaled from a common inhaler, the Balsam or Acid being placed in boiling water. (44.)

It is regarded as a powerful expectorant in chronic chest affections, coughs, asthma, suffocative catarrh, spasms of the chest, especially when these occur in connection with amenorrhœa and chlorosis. (11.)

Chest.—Pain about the third rib, and on the right side, midway between the sternum and the side.

Pain in the right side of the back, about midway between the tenth vertebræ dorsalis and the side.

Pain in the left side, about the sixth rib, increased by deep inspiration, and by bending the body to either side. Deep penetrating stitch in the posterior part of the left side, about the sixth rib. (30.)

Clinical Remarks.—In a case where inflammatory rheumatism and violent *asthma*, both of long-standing and frequent recurrence, co-existed, and for which I gave the Benzoic-acid the patient remarked a great amelioration of his asthmatic paroxysms. This is worthy of mention, inasmuch as one of the benzoated tinctures of opium was formerly termed Elixir-asthmaticum, and it may be that further observations will prove the Benzoic-acid to be a remedy for some peculiar forms of asthmatic disorder. (30.)

Breasts.—*In sore and cracked nipples*, the local application of Tinct. Benzoin is the most useful remedy, of all recommended for this purpose; it forms a thin coating, like gutta-percha, which is not removed by the infant in nursing, and which need not be washed off before nursing. (11.)

Back.—Dull pain in the back in the region of the kidneys. (30.)

Extremities.—Nicking and cracking of the joints, both of the superior and inferior extremities, during motion; Pain in the joints of the fingers of the right hand. The pain leaves the right hand and appears in the left arm, then extends downward into the elbow, and leaving this situation, next appears in the region of the heart.

The pain having left these parts, appears in the thigh and ankle.

Pain in the right tendo-achilles, and in the region of the heart at the same time.

The pain is incessantly and suddenly changing its location, but its most constant seat is in the region of the heart. After leaving the right, the pain appears in the left tendo-achilles. Aching pain in the hip, then in the left thigh, next in the knees, then in the toes.

Sharp pain in the left ankle, during the time it supports the weight of the body while walking.

Upon supporting a slight part of the weight of the body on the left foot, severe pain in the tendo-achilles close to the os-calcis. Pain in the gastrocnemii. Pain in the toes. Pain in the large joints of the great toes, with slight tumefaction and redness. Stitch passing upwards, through the right great toe, followed by a burning, which changes gradually again to a stitch, appearing afterwards in the left great toe, from which it vanishes with a thrilling sensation (in the morning).—Whilst lying down (8th day): itching on various parts of the extremities, yielding rather an agreeable feeling on being scratched, but leaving a burning. Feeling of coldness of the knees, as if they were blown upon by a cold wind.

Frequent pulse. (30.)

Clinical Remarks.—In many cases of rheumatism and of painful joints, with arthritic concretions, arthritic irritation of the great toe-joints attended with swelling and redness of the skin, urine highly colored and of strong ammoniacal odor, I have employed Benzoic-acid with much benefit. (Jeanes.) [30.]

It seems to be one of the most homœopathic remedies for wandering rheumatism, and rheumatic affections of the heart.

In *Gout*, Benzoic-acid has been advised by Drs. Ure and Prout, to prevent the disposition of, and to remove when formed, the masses of Urate of Soda, which so commonly occur about the joints of gouty subjects. (44.)

According to *Lehmann*, Benzoic-acid sometimes occurs in animal fluids, and its conversion in the animal body has already thrown much light on the metamorphosis of the tissues.

Benzoic-acid stands in near chemical relation to Toluylic-acid, Copaivic-acid, and Cinnamic-acid.

Benzoic-acid also bears some relation to Hydrocyanic-acid, for when heated with Potassium it yields Cyanide of Potassium. In fact, the oil of bitter almonds is regarded as a combination of Benzoyl with hydrogen; and Benzoin may be formed by the action of caustic alkalies on oil of bitter almonds, containing Hydrocyanic-acid. Again Nitrobenzide is a yellow fluid with a sweetish taste and cinnamon-like odor.

Benzoic-acid has been found in the urine of the Herbivora and Carnivora, and it very often occurs in the place of Hippuric-acid. Again, when the urine of horses has stood for some time in the stable and begun to be ammonical it never contains Hippuric-acid, but only Benzoic-acid. In like manner we often meet with only Benzoic-acid in human urine, and if some portions of it have long been exposed to the air, they undergo such a change that only Benzoic-acid is found in the whole urine. Hence it appears to be a fact, as Liebig assumed, that a ferment is formed in the urine by means of which the Hippuric-acid is converted into Benzoic-acid; for if we mix a specimen of urine, whether from man or from the horse, with another specimen containing Hippuric-acid, on separating the acids from the mixture, we almost constantly obtain Benzoic-acid alone, the ferment of the urine containing Benzoic-acid probably acting on the Hippuric-acid of the fresh urine. Moreover Benzoic-acid when conveyed into the organism is invariably converted into Hippuric-acid, as observed by Woehler, Keller, Ure, and others.

The ingestion of Benzoic-acid causes an extremely disagreeable irritation in the throat, and subsequently a very profuse diaphoresis; it is also one of the very few acids which produce a marked augmentation of the acidity of the urine.

ACIDUM FLUORICUM.

FLUORIC ACID.

This acid plays an important part in the animal economy. Brugnatelli believed that he had discovered the existence of this acid in the gastric juice of birds, and Treviranus also believed that, when the contents of the intestinal canal of fowls were digested in porcelain vessels, the glazing was attacked on account of the presence of Hydro-fluoric-acid. Again, the Fluoride of Calcium is so integral a part of the enamel of the teeth, that we must ascribe to its presence (at least in part) the polish and extraordinary hardness of that substance. The presence of Fluoride of Calcium has also been determined with certainty in the bones of almost all animals. Berzelius found 2. 1 $\frac{1}{2}$ of Fluoride of Calcium in the Dentine, and 3. 2 $\frac{1}{2}$ in the enamel of a man's teeth.

The presence of fluorine in blood and milk has been clearly demonstrated by Dr. George Wilson.

In regard to the origin of the Fluoride of Calcium, Lehmann says we cannot doubt that it is easily conveyed into the animal system with the food; we need only remember that many mineral waters contain traces of fluorides, and that plants take up a little Fluoride of Calcium from micaceous soils.

Fluoride of Calcium was detected by Berzelius in the Carlsbad water, and has been found in other mineral waters.

Fluoric-acid is a solvent for some elementary principles which resist the action even of Nitro-hydro-chloric-acid; thus it solves Silica in particular, also Silica and Silicic-acid. It is especially useful as a solvent of Silex in the animal economy, for small quantities of Silica are found in the blood, in the white of egg, in bile, in urine, and in the solid excrements, and occasionally in certain morbid concretions; it has also been shown by numerous experiments that Silica forms an integral constituent of hair and feathers, and hence it is evident that a perfect solvent for it is required in order that it may be readily conveyed through the most minute capillaries to its appropriate destination.

Fluoric-acid is an admirable solvent; its vapor is more pungent than Chlorine, or any of the irritating gases. Of all substances it is the most destructive to animal matter; it produces the strongest caustic effects; when applied to the skin it causes violent pain, the parts around become white and painful, forming a dense pustule filled with matter; even a very small and hardly visible quantity will produce the same effects, though only after the lapse of several hours. The smallest quantity applied to the hand excites violent itching, and pustules filled with matter are soon formed, according to Liebig; in fact the acid unites itself to the skin to such a degree, that it cannot be washed off even by means of carbonate of soda, although the pain may be mitigated. The solution of $\frac{1}{4}$ th of a grain, and even that of $\frac{1}{16}$ th does not produce either pain or redness; $\frac{1}{8}$ th of a grain, however, produces some pain,

redness and heat, the epidermis falling off in scales after the lapse of a few days.

In consequence of its solvent action upon flint, Fluoric-acid acts energetically upon glass; the transparency of the glass is instantly destroyed, and heat is evolved.

As Fluoric-acid is sometimes developed in excess in the stomach, we may hazard the conjecture that it sometimes gives rise to intense suffering and may even be the cause of the well known perforating ulcer of the stomach; an excess of the acid will also cause rapid caries of the teeth; and may even cause felons, &c., &c.

In order to give a better idea of its action in its concentrated state, we append the following case, from Frank's Magazine.

Franz Pschick assistant in the Chemical Institute of Dr. Jacquin made some experiments with it publicly, December 23d, on which occasion he accidentally exposed his hand to the fumes of Acid-Fluoric. for about *one minute*. An hour after the occurrence, while engaged in cleaning some instruments in warm water, he experienced a very troublesome *prickling in the extremities of the fingers*—and shortly after such violent pain, as obliged him to stop short from his work; soon after this he felt a *chilly* sensation in *his left arm* gradually extending *all through his body*; in the evening when he was seized with a violent *fever and chill*, he mistrusted the real cause of his suffering: the pain now became intolerable, and the integument of the hand very much swollen. On the morning of December 24th *all the fingers* of the left hand, but especially the thumb, were *very much inflamed* and discolored, with very great stiffness of the first and second phalanges; and severe pain extending to the axilla. He then put his hand in albumen, drank water with some nitrate of potash, and applied a poultice of raw potatoes to his hand, all of which eased his condition somewhat. Towards evening, however, the pain and swelling increased again; he re-applied poultices—but could not sleep during the night.

On the 25th, the extremities of the fingers had become all white and the thumb covered with large blisters, attended with severe pulsating pain in the same; on opening one blister after another, a thick, brown, and very offensive-smelling liquid exuded from the same, having an acid reaction. In the course of four weeks the patient gradually recovered.

Mental Condition.—Discontentment and excessive ill-humor, were felt by Hering, Campos and others, followed by indifference and forgetfulness, and finally succeeded by perfect contentment and uncommonly gay disposition of the mind.

Clinical Remarks.—Taking advantage of these effects upon the moral state, Hering gave it to an invalid old lady, who quarrelled continually with nurses, relatives, and the whole house; two doses of Fluoric-acid soon rendered the old lady patient and cheerful, and she continued so.

Head.—Whilst sitting, a dull pressure and compression in the

occiput, particularly towards the right, with the continual internal sensation of numbness in the left forearm, and severe pricking, whilst stretching it. (Hering.)

Nausea and vertigo. Painful and sudden determination of blood to the forehead. (Hering.) Dullness of the head in the morning; towards the right, with numbness or burning in the forehead, afterwards felt in the jaws. (Hering, &c.)

Dull heaviness of the head, forehead. Pressing pains in the forehead. (Williamson, Husmann, &c.) Sharp shooting pain through the head. (Campos.) [30.]

He felt as if struck with apoplexy, with rush of blood to the head, and partial loss of consciousness, so that he could not recollect where he was. The second dilution caused increased flow of saliva, pain in the head, and sensation as if the head was too heavy, and would drop from one side to the other. The first dilution caused a dull heaviness and pain in the whole head. Rush of blood from the nape of the neck through the centre of the head towards the forehead.

Severe pressing pain in the left, or in both temples, followed by pain in the left shoulder; sharp darting pains, much worse than a prolonged electrical shock, or compression of the ulnar nerve, shooting and painful induration in the brain, occurring so quickly as to excite a very disagreeable idea of impending danger. Rush of blood to the head, with heat in the forehead, increasing to frontal headache. Pain over the right eyebrow, followed by pain in the toes; pain on the right side of the head, followed by pain under the right shoulder-blade.

Clinical Remarks.—This remedy promises to prove a rival to Glonoine, against rush of blood to the head, apoplectic attacks; it also seems homœopathic to rheumatic and neuralgic headaches, especially of the wandering kind; and to some forms of sick headache. (11.)

Scalp.—Itching of the head, and falling off of the hair.

Clinical Remarks.—Williamson who had been becoming more and more bald for years, found after two months' use and action of Fluoric-acid that a new growth of hair was commencing, and he is now much less bald than before. The Fluoric-acid, and Fluoride of Calcium may prove a natural stimulant to the hair, at least it will render a sufficient quantity of Silicia soluble to supply the want of a full growth of hair. A weak solution might be applied locally to the scalp. (11.)

Eyes.—Drawing pain around the eyes. Elevated red blotches and scaly eruption over the brows. (Williamson.)

Frequent attacks of burning, itching on the eyelids and inner canthus of the eyes, inducing one to rub and scratch. (Hering, Husmann, &c.)

Increased lachrymation. (Esrey.)

The sight clearer. (Campos.)

Bright, red sparklings, cross each other in all possible directions, like lightning, on closing the eyes in the evening. (Hering, Husmann.) [30.]

Clinical Remarks.—It has removed muscæ volitantes; it is homœo-

pathic to photopsia and lachrymation; also to Tinea-ciliaris; and probably to scrofulous ophthalmia. It has proved useful in fistula lachrymalis, attended with pain in the eye, extending very far down into the upper jaw; and into the nostril, followed by soreness and painful sensibility of the bones of the upper jaw and nose. (11.)

Nose.—Sore feeling in the nose; appearance of pimples; fluent coryza, with sneezing. Pains about the bones of the nose, extending into and behind the eye and down into the malar bones.

Clinical Remarks.—A very large pimple with inflamed base on the top of the nose, was cured in two days by Acid.-fluoric. 15th. (Jeanes.)

A chronic inflammation of the nose with pain, redness, some swelling and heat, disappeared within three days; after the formation of a small pustule, with a smooth surface, on a painful red circle. (Hering.) [30.]

Ears.—Stitches and pressing pain in the ears, followed by pains in the heels. (Freitag, Husman.)

Increased sensitiveness of hearing in the morning. (Hering.) [30.]

Clinical Remarks.—It may prove homœopathic to some forms of rheumatic ear-ache, especially in rheumatic irritation of the fibrous tissues about the ear. (8.)

Face and Jaws.—Heat and perspiration in the face. (Hering.)

Itching on the right side of the face. (Geist, Husmann.)

Deep pain in the bones around the eyes. (Hering.)

Painful sensibility in the jaws, spasmodic contraction; drawing and gnawing pain in the inferior maxillary-bones; burning pain on the outside. (Hering, Neidhard.) [30.]

Clinical Remarks.—This remedy seems to act specifically upon the periosteum of the bones of the face; in this respect its action is somewhat similar to that of Mezereum. (11.)

Teeth.—Teeth feel warm; the warmth was felt in the teeth, and not in the gums; drawing, digging toothache. (Smith. Husman. Neidhard.)

Sensation of roughness, as if broken, in the lower incisor teeth. Tongue feels painful on touching it. (Hering.) (30.)

Clinical Remarks.—A fistula near the right eye-tooth, of several years' duration, gradually disappeared while taking the remedy; Fluoric-acid seems to exert a specific action upon the fibrous tissues and periosteum about the jaws and teeth. (11.)

Mouth.—Warm, burning sensation, as if from a sore on the inner side of the lips.

Taste.—A solution of $\frac{1}{8}$ gr. caused in the mouth a violent pain, as from hot water, the teeth becoming very painful.

Nausea.—One drop of the $\frac{1}{6}$ th produced a bluntness of the teeth, a sensation of sticking, contraction and tension, after which the interior cuticle of the mouth became whitish and peeled off.—Twenty drops of the $\frac{1}{6}$ th, taken in water, excited frequent sour eructations, sensation of heat and disagreeable flat taste in the mouth. (Kreiner.)

The taste is quite intolerable, like ink. (Thenard. Hering.)

Acid, saltish, sweetish taste, with a greasy feeling.

(Pehrson. Gosewisch. Jeanes. Hering.)

Eructations, acid, sour, and bitter, with pyrosis, passage of flatulence, and choking.—Nausea. (Neidhard. Campos.)

Sickness of stomach, with desire to vomit, vertigo and headache.

(Esrey. Smith. Neidhard. Hering.)

He vomits several times with difficulty, a clear, viscid fluid, containing coagulated white pieces. The whole day he felt nausea, eructations and lassitude. (After thirty of $\frac{1}{6}$ solution about two grs. Kreiner.) *Increase of saliva.*

Clinical Remarks.—It may prove curative against waterbrash, soreness of the stomach, gastralgia, &c. (11.)

Palate and Fauces.—Prickling, and a smarting feeling on the tongue and palate. Tenderness and irritability in the larynx; feeling of soreness when coughing. (Jeanes.)

Heat and dryness in the mouth and fauces. (Husman. Williamson.) Violent burning in the fauces and a sensation of constriction; rumbling in the bowels, pressure in the stomach and burning eructations, choking for two hours. (Ten drops of $\frac{1}{6}$ solution.) (Kreiner.)

Sore throat, with difficult deglutition, hawking up of much phlegm, mixed with some blood. (Hering.) (30.)

Clinical Remarks.—It seems homœopathic to the chronic pharyngitis which is too commonly and erroneously termed bronchitis; also to pharyno-laryngitis; and to chronic pharyngitis, when it arises from gastric disease; also to ulceration of the throat and larynx. (11.)

Stomach.—Pressure in the stomach and burning. Uncomfortable feeling. (Williamson.)

Heat in the stomach before meals, which disappears afterwards, then heaviness in the stomach, and after some hours again heat; aggravated during exercise. (Gosewisch.) (30.)

Clinical Remarks.—We have already alluded to its applicability against dyspepsia, acidity of the stomach, water-brash, and flatulence; it is particularly useful when there is considerable tenderness of the stomach to pressure, with suspicion of ulceration of the stomach, when attended with vomiting of small quantities of blood-streaked acrid mucus. (11.)

Abdomen.—Pain in the left side of the abdomen, in the region of the spleen; above the hip, hindering respiration. (Geist.)

Rumbling in the bowels, with erratic pains; acute shooting pain in the bowels, as if caused by wind. (Smith.) (30.)

Clinical Remarks.—It seems to exert a specific action upon the spleen, as Geist, Pehrson, and Freitag all felt pains about the region of spleen, and one experimenter, who had had a pain in the region of the spleen, for six days, found it to cease quickly, and it did not return again. (11.)

Fæces.—Inclination to diarrhœa, two free passages the first day.

Awaking after midnight with a large quantity of viscid, tasteless saliva in the mouth, attended with a burning pinching pain in the stomach, and with a sensation of distention from flatulency; after the passage of some wind, the pain is increased, followed by a copious pappy evacuation of the bowels, after which the pain seemed to concentrate itself in the region of the navel, and is followed by a second passage; in the morning he had a third passage. (Pehrson.)

Copious pappy evacuations; watery stools, with pain around the navel. (Pehrson.)

Frequent discharges of inodorous flatus. (Campos.)

Small, excessively offensive discharges of wind. (Hering.) [30.]

Anus.—Violent itching within and around the anus, violent itching; returning frequently. [30.]

Clinical Remarks.—It has proved somewhat useful against prolapsus ani; against irritation and constriction of the sphincter-ani; and against piles. (11.)

Groins, Bladder and Urine.—Pain in the region of the bladder. (Hering.)

Free and frequent discharge of light colored urine, of sufficiently large, but not increased quantity. (Campos, Hering, Williamson.)

Pungent and strong odor of the urine. (Williamson, Hering.) [30.]

Offensive and pimple-colored urine.

Genital Organs.—Sexual passion much increased, with erections at night, during sleep; (Gosewisch, Campos.)

Occasionally stitches and drawing through the left testicle, in the abdominal ring and spermatic cord. (Neidhard.) [30.]

Menses eight days too soon and more copious, thick and coagulated.

Clinical Remarks.—This remedy seems to exert almost as specific an action upon the genital organs as Phosphorus and Platina; it has aroused the sexual organs even in quite elderly persons.

Chest.—Increased irritability of the larynx, with soreness of the cartilage.

Soreness in the chest, oppression, pressing sticking pain in the chest. (E. Smith, Neidhard, Geist, Williamson.) [30.]

Clinical Remarks.—It seems homœopathic to many attacks of chronic but painful laryngitis, attended with soreness of the chest. (11.)

Breast.—Itching on the nipple and around it, in the evening; the nipple next morning is much larger, more red, and the areola darker. A thin brownish crust is formed on the areola. (Hering.) [30.]

It may prove useful to soreness of the nipples, and inflammation and suppuration of the breasts. (11.)

Respiration.—Oppression in the chest, difficulty of breathing. (Bute, Hering.) [30.]

Clinical.—In two cases of incurable hydrothorax, Fluoric-acid, 3d. gave much relief. (Jeanes.) [30.]

Heart.—Uneasiness about the heart, painful jerking in the heart; continual soreness about the region of the heart.

Clinical Remarks.—It may prove useful against some rheumatic affections of the heart, especially of the fibrous tissues, such as the valves, and chordæ tendiniæ. (11.)

Neck.—Drawing pain in the right side of the neck. (Freitag, Williamson.)

Now and then warm flushes like a warm breath proceeding from the nape of the neck towards the occiput. Stiffness and soreness of the nape of the neck.

Back.—Pain in the back and shoulder; itching of the back. (Williamson, Hering.) [30.]

Great heat in the back extending to the loins; the remedy is very homœopathic to aching pains in the os-sacrum.

Upper Extremities.—Rheumatic pain deep in the bones of the arms; *wandering pains*; tingling sensation, soreness, aching pain, and numbness of the arms, bones of the arms and fingers. (Hering, Freitag, Jeanes, Neidhard, Williamson.) [30.]

Heat in the palm of the hands. (Husmann, Hering.) [30.]

Numbness and lameness of the arms; heaviness and numbness of the arms; falling asleep of the forearms and hands; numb pains, lameness and powerless sensation in the hands; the hands are swollen and warm, and uncommonly red, appearing as if marbled.

Clinical.—It removed a chronic perspiration in the palms of the hands, which persisted even during cold, dry weather; although the back of the hand was dry, still, his palms were constantly so moist that every one who shook hands with him observed it, it disappeared on the fourth day after taking Ac.-fluoric. (Geist.) [30.]

Lower Extremities.—Acute stitches on the right hip bone, spreading themselves over the glutei muscles. (Geist.)

Pain in the right ischiatic nerve.

Laming, pressing, burning, wandering pain in various parts of the lower extremities. (Williamson, Jeanes, Hering.)

Soreness and pain on motion, in the left hip, particularly felt when getting out of the bed, worse in the morning. (Williamson.)

Pain in the knee and ankle joints. (Neidhard, Smith, Williamson.)

Heat and crawling sensation of the sole of the right foot. (Williamson.) [30.]

Clinical Remarks.—It is particularly serviceable against those rheumatic and neuralgic pains of the extremities, which are very apt to fly to the head, or heart.

Skin.—Burning pains on small spots of the skin, in different parts of the body. (Hering, Geist.)

Itching in various places of the body, mostly on the posterior parts. (Hering.)

Violent pricking itching of the skin and small pimples here and there. (Hering.)

Several small light carmine red, elevated, round blood vesicles, resembling little flesh warts; they are very soft and compressible, and by a strong and steady pressure the blood disappears, but immediately returns again. They are very perceptible as light red enlargements of the capillaries raising up the cuticle. (Hering.) [30.]

Clinical.—Numerous varicose veins of twenty years' standing on the left leg of an old man, were diminished one-half, after repeated doses of Fluor.-acid. (12th, Neidhard.)

Heat.—Increased heat of the body. (Hering.)

General feeling of heat, heaviness and lameness of the whole body. (Neidhard.) [30.]

Clinical Remarks.—The moderate use of this remedy is supposed to render one more capable of bearing the summer heat, and to prevent liability to sun stroke.

Perspiration.—*Profuse*, sour, offensive perspiration in the afternoon. (Williamson.)

For several evenings an unusual profuse and glutinous perspiration, with itching. (Hering.) (30.)

Sleep.—Sleeplessness. (Campos.) Day and night without his usual sleep; he feels as if he had already slept.

Drowsiness in the forenoon. (Hering, Campos, Pehrson.)

Sudden sleepiness in the evening. Profound sleep until late in the morning. (Hering.)

Vivid dreams. (Hering, Husman, Pehrson.) (30.)

Clinical Remarks.—It promises to prove useful against sleeplessness from fulness of the head, or from the activity of the brain, with frequent awaking and vivid dreams.

General Symptoms.—Jerking pains in different parts of the body. (Hering, Neidhard, Campos.)

Increased ability to exercise his muscles without fatigue. (Campos,) regardless of the most excessive heat of summer, or cold in winter. Hands, fingers, toes, feet, jaws, lips, eyebrows and eyelids, muscles of the face, &c. are all in motion, as in *Chorea*.

ACIDUM GALLICUM.

GALLIC ACID.

Authorities.—Waring's Therapeutics. (44.) Wood and Bache. (7.)

The astringency of Nut-galls depends upon the presence of Tannic- and Gallic-acids; of the former they contain 26, of the latter 6 per cent. Gallic-acid in its properties is very similar to those of Tannin, but it is much weaker; still in all cases of hæmorrhage in which the bleeding vessels must be reached through the route of the circulation, it is believed to be more efficient even than Tannic-acid, as its chemical affinities do not offer the same impediments to its absorption as those of

the latter acid. It is said to be the active ingredient in Ruspini's styptic. Mr. C. Wetherill, believing that Gallic-acid differs from the Tannic wholly in containing more water; conceived the idea of preparing the former from the latter by the fixation of water; this he effected through the agency of Sulphuric-acid; having mixed thirteen drachms of Tannic-acid with twenty-two fluid-ounces of Sulphuric-acid and four times that bulk of water, he heated the mixture to the boiling point, and then allowed it to stand; in a few days an abundant precipitate of white Gallic-acid took place amounting to 87. 4. per cent. of the Tannic-acid.

The experience with it is principally clinical and palliative.

Nose.—*Clinical Remarks.*—In epistaxis, it is a useful application; dossils of lint impregnated with it may be applied to the nostrils; or a solution of it in warm water may be snuffed up the nostrils, and the throat gargled with it. (11.)

Stomach and Bowels.—It does not so frequently produce constipation as Tannic-acid.

Clinical Remarks.—In Dyspepsia arising from a relaxed condition of the gastric mucous membrane, Dr. Sampson derived great benefit from Gallic-acid. In *Hæmatemesis* and bleeding from the bowels, or from any other part with which Tannic-acid can be brought in direct contact, it will be found more useful than Gallic-acid; but when the hæmorrhage proceeds from the spleen or liver, then Gallic-acid will prove most efficient.

Dr. Bayles says: In *Pyrosis* the most marked benefit will follow the use of this remedy; it not only checks the secretion with a certainty and rapidity he has never seen to follow the administration of any other remedy, but it gives general tone to the stomach, increases the appetite, and even removes *constipation* in many cases. (44.)

Kidneys.—In *Hæmaturia*, Dr. Garrod has used Gallic-acid with the greatest advantage, and is inclined to look upon it as the best styptic we possess. *Dose*, three grains, three or four times a day.

Albuminuria.—Sampson relates four cases in which the albuminous character of the urine was changed to a healthy standard by Gallic-acid. *Dose*. Ten grains thrice daily, or oftener; he considers that smaller quantities would have proved insufficient. (11.)

In many cases of chronic nephritis, one grain doses of the first trituration of Gallic-acid repeated every three or four hours, has effected prompt cures. It removes pains arising from sub-acute inflammation of the kidneys more speedily than any remedy we have ever employed. We have witnessed its efficiency also, as a curative agent in several calculous affections of the kidneys. A number of excellent cures of nephritic maladies, are reported by Dr. Redmond Coxe, jr. of Philadelphia, who employed the remedy at the first trituration. (10.)

Genital Organs.—In *Menorrhagia* it has been found eminently useful; severe cases successfully treated by it are recorded by Stevenson, Simpson and others; they continued its use during the intervals, as well as at the period of the discharge.

In *Leucorrhœa*, Drs. Ballard and Garrod state, no remedy which they have employed will bear comparison with Gallic-acid, either for the rapidity with which the cure is effected, or in the permanency of the result. They used it internally, and by vaginal injection.

In *Gonorrhœa*, Sampson says it will change a thick and yellow discharge in four days to the smallest quantity of colorless gleet.

Chest.—The excessive *expectorations* of phthisis and bronchitis are much lessened by Gallic-acid.

In the profuse *perspiration* of phthisis it has been used successfully: Ballard and Garrod state, that although, like all other medicines, Gallic-acid sometimes fails in arresting these discharges, yet they have more reason to be satisfied with it than with any other remedy which they had formerly been in the habit of using.

During the past two years we have been in the habit of prescribing this acid in advanced phthisis with copious expectoration of purulent matter, profuse night-sweats, diarrhœa, and other hectic symptoms, and for the most part with favorable results.

In the case of a young lady, who had a cavity in the left lung, with copious expectoration of pus, night-sweats, frequent hæmorrhages from the lungs and bowels, evening-fever, and pulse 130 to the minute, the prolonged use of Gallic-acid of the first trituration, dried up the cavity, stopped the expectoration, the sweats, the hæmorrhages, and the fever, and enabled the patient to regain her flesh and strength. Eight months have now elapsed since the cessation of these serious symptoms, and the lady experiences no difficulty except great shortness of breath upon the slightest exertion. Her flesh, strength and general appearance are the same as when she enjoyed perfect health; but the sound of the left lung on percussion is dull. (10.)

ACIDUM HYDROCYANICUM.

PRUSSIC-ACID.

This acid may be readily procured from many vegetables, as from bitter almonds, apple-pits, the kernels of peaches, apricots, cherries, plums, and damsons; also from the flowers of the peach, cherry-laurel and wild-cherry; from the bark of the latter, and from the root of the mountain-ash; it has also been obtained from the ergot of rye.

It is rarely or ever found in animals; but Cyanogen has been detected in combination with iron, in the urine, menstrual fluid and sweat; and with Sulphur and Potassium in the saliva; the greenish-blue discharge of some ulcers probably depends upon the presence of Prussiate of Iron, at least Pereira once detected it. During the

decomposition of animal matters, Cyanogen is frequently generated, as when blood and Carbonate of Potash are calcined in an iron pot. Also, when cheese is exposed to the action of water and the sun, it disengages Ammonia, and if heated in this state with Alcohol, it yields traces of Hydrocyanic-acid. Taylor says that the organs of persons who have died from natural causes have occasionally been found to exhale an odor of Prussic-acid, as he once perceived.

It is probable that in many weakly, nervous and dyspeptic patients, Hydrocyanic-acid is found in the system, causing great sinking feeling at the pit of the stomach, debility, nervousness and cramps.

Poisoning by Prussic-acid is so commonly the result of an attempt at suicide, or of unpardonable negligence in allopathic physicians, that we ought to be well acquainted with its characteristic symptoms.

When a large dose has been taken, as from half to one ounce of the diluted acid, insensibility commences in one or two minutes, attended with convulsive respiration at long intervals, the patient appearing dead in the mean time.

Case 1.—An English surgeon in large practice took seven drachms of dilute Prussic-acid; he was quite insensible in two minutes, and survived about four or five minutes; he lay on the floor senseless; there were no convulsions of the limbs or trunk, but a faint flickering motion was observed about the muscles of the lips; respiration seemed to cease for some seconds, then it was performed in fits and the act of expiration was remarkably deep and lasted for a long time.

In another case, besides the above symptoms there was coldness of the hands and feet, and no pulse was to be felt; convulsions of the limbs and trunk are sometimes observed; the finger nails have been found of a livid color, and the hands firmly clenched.

Case 2.—From forty grains of the Prussic-acid a man was observed immediately to stagger a few steps, and then to sink down without a groan, apparently lifeless; the pulse was gone, and the breathing for some time imperceptible; but after a short interval he made so forcible an expiration that the ribs seemed drawn almost to the spine; the legs and arms then became cold, the eyes prominent, glistening and quite insensible; after one or two more convulsive expirations, he died in about five minutes. (Taylor.)

Case 3.—From two drachms of medicinal-acid; in about two minutes, extreme bitterness in the mouth, great confusion of the head, headache, and loud ringing in the ears; he walked a few steps, leaned forward on a table, became insensible; his thighs became rigid and were drawn up to the abdomen, when he fell backwards; in this state he remained three or four minutes during which time he was violently convulsed; from the use of Ammonia, sensibility soon returned, and vomiting with great relief supervened, and in half hour he was quite well, with the exception of pain and feeling of distension in the head; during the convulsions, the arms were also rigid and on drawing them to one side, they forcibly reverted to their former

position; the eyes were shut, teeth clenched, and muscles of the face violently convulsed.

Case 4.—A man had taken for two months, on account of a chronic catarrh, ten drops of Ittner's-acid, without experiencing the slightest toxicological effect; at length he was found in bed, one morning with headache, blindness, dilated insensible pupils, feeble irregular pulse, occasional suspension of breathing and rapidly increasing insensibility; in no long time spasms commenced in the toes, and gradually effected the rest of the body, till at length violent fits of general tetanus were formed, lasting from six to ten minutes, and alternating in the intervals with coma; subsequently the spasms were confined to the jaws and eyes, and delirium succeeded; at four, P. M. he was tolerably sensible, but the delirium returned at night; at ten, A. M. next day, he recovered his sight, and on the subsequent morning he had no complaint, but headache and pain in the eyes.

Antidotes. *Ammonia*, cold affusion, and electricity. John Murray of London was so convinced of the efficacy of *Ammonia* as an antidote that he expressed himself ready to swallow a dose of the acid large enough to prove fatal, provided a skillful person were beside him to administer the antidote. Dupuy, Orfila and Christison agree to this, provided the *Ammonia* also be inhaled.

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PHENOMENA.

Intellect.—Inability to think; dullness of the senses; vertigo; illusion of the senses. 1. Violent delirium; gay delirium, with desire to sing and dance, and acceleration of the circulation. (27.) Sleepiness; giddiness. 2. Indisposition to exert the mind; confusion of ideas. 4. Sudden loss of consciousness and of sensation. (2.)

Clinical Remarks.—It is one of the most homœopathic remedies to *sudden coma*; from opium the coma comes on gradually, rarely under the lapse of fifteen minutes; while from Prussic-acid it is instantaneous—even from doses too small to prove fatal, coma is seldom delayed beyond two minutes. (11.)

Affections and Disposition.—Despondency. (1.) Gloomy disposition; irritable mood, which disappears in the open air; fretful, peevish, and ill-humored; gay, laughing and singing mood, as if intoxicated. (4.) Great agitation and excitement. (2.)

Clinical Remarks.—Lonsdale thinks that hypochondriasis, originating in derangement of the stomach, or kept up by a morbid state of the chylopectic viscera may be advantageously treated by this remedy; it certainly seems homœopathic to it, especially when attended with pyrosis. (44.)

Head.—Oppressive pain in the forehead, or in the left side of the occiput; tension in the frontal region; pricking in different parts of the head. (1.) Feeling of tightness in the head; tightness in the forehead; heaviness and pressure in the forehead; tightness of the right side of the head, with pressure in the occiput and forehead; pressure in both temples extending to the orbits; lancinating and boring pain in the forehead and orbits. (4.) Very-severe tearing pains, sometimes at the bottom of the orbits, sometimes in the temples, and sometimes at the occiput; pain in the frontal region. (27.) Pain and feeling of distention of the head. (3.) Head confused; feeling of tightness around the head. (2.)

Clinical Remarks.—It is one of the most homœopathic remedies to passive venous congestion of the brain; to congestive apoplexy; to dropsy of the brain, consequent upon excessive congestion, &c. The peculiar intermittent respiration caused by Prussic-acid is highly characteristic of dropsy of the brain, and also of softening of the brain. Chapman and Montagh suggest as one of the remedies for the apoplectic condition, that is found towards the end of some cases of Asiatic cholera. (11.)

PATHOLOGY.—*In men:* Brain dotted with blue points, and congested with blood; the ventricles of the brain turgid with blood.—Dura-mater covered with a thick, dark, bloody layer.—A quantity of thick, dark-blue blood in the brain.—(1.) Two ounces of dark red serum under the dura-mater.—Cerebral veins distended with thin uncongealed blood.—Brain softer than natural.—Bluish spots in the brain.—Lateral ventricle distended with serum.—Choroid plexus, dark, bluish red.—Cerebellum greyer than natural.—Tentorium cerebelli filled with very dark-blood.—Vessels of the dura-mater, pia-mater, basis cranii, choroid plexus, and substantia corticalis much distended with blood. (4.)

Eyes.—Obscuration of sight; pressure over the inner canthus of the right eye; heaviness of the eyes, and a feeling as if they were immovable; lancinating and boring pain in the orbits; photophobia; protruded, glassy eyes, with dilated pupils. (4.) Obscured vision; pupils usually dilated but sometimes contracted. (3.) Pupils very much dilated and but slightly sensible to light; eye-balls prominent, very hard, and tender to the touch; the veins of the eye-lids very much dilated, and varicose; eye-balls convulsed, first being drawn towards the right, and then upwards; pupils contracted; eyes prominent, fixed and insensible to light. (27.) Pupils fixed and dilated. (2.)

PATHOLOGY.—A very peculiar glistening and staring expression of the eyes, so as to render it difficult to believe that the person is really dead.

Clinical Remarks.—The vapor of Prussic-acid has been applied to the eyes in cataract, and opacities of the cornea, with some success it is said; still the vapor applied to the healthy eye will cause dimness of the cornea. (11.)

Ears.—Pressure in both ears, with buzzing. (1.)

Nose.—Wings of the nose bluish. (1.) Convulsive twitchings of the wings of the nose. (2.)

Clinical Remarks.—A weak solution has been applied successfully to Acne about the face and nose. (11.)

Face.—Lock-jaw. (1.) Violent convulsions of the face, which is dotted with lead-colored spots; trismus. (27.) Face convulsed, and swollen; distortion of the mouth.

PATHOLOGY.—Lead-colored spots sometimes observed on the face after death. (27.)

Mouth, Pharynx.—Increased secretion of saliva; tongue coated; pain in the palate; spasm in the œsophagus; inflammation of the pharynx and œsophagus. (1.) Difficulty of swallowing drinks, as if from paralysis. (27.) Irritation at the root of the tongue, changing to a scraping sensation; feeling of constriction in the tongue. (4.) Very bitter taste in the mouth; irritation of the throat. (3.) Trismus; distortion of the mouth; tongue and throat red and inflamed; sore throat, rendering it difficult to swallow drinks. (2.)

PATHOLOGY.—Violet color of the larynx, trachea, and œsophagus, down to the stomach.—Redness of the mucous membrane of the throat and œsophagus. (2.)

Clinical Remarks.—It is quite homœopathic to salivation and ulceration of the mouth; probably also to chronic pharyngitis; (8.) and to paralysis of the pharynx and œsophagus, with great inability to swallow. (11.)

Stomach, Gastric Symptoms.—Inflammation of the stomach; loss of appetite. (1.) Oft-repeated vomiting; sensitiveness of the epigastric region; complete loss of appetite. (27.) Loss of appetite, which was afterwards increased; feeling of warmth in the stomach; flat taste; aversion to food, although very hungry; heartburn; feeling of heaviness and pressure in the stomach. (4.) Frequent nausea; vomiting. (3.) Pain and fullness in the epigastric region. (2.)

PATHOLOGY.—Veins of the stomach much injected.—Mucous membrane of the stomach of a reddish brown color.—Dryness of the mucous membrane of the stomach near the pylorus, but moist and easily separated from the middle coat in other parts.—(4.)

Clinical Remarks.—We have in several instances successfully employed the 12th dilution of Prussic-acid in cardialgia. It has long been used in this malady by the other school, and with success for the most part, although empirically. Pereira has often seen it cure promptly severe forms of English cholera, attended with violet vomiting and purging, after opium had failed. (10.)

The immediate and permanent relief sometimes obtained in gastrodynia from Prussic-acid is very extraordinary; cases which have lasted for months and seemed to arise from some organic disease, may sometimes be cured in a few hours. It is also peculiar that in all

cases we obtain either perfect success, or meet with complete failure, it is said never to cause partial relief. It not only allays pain in the stomach, but relieves vomiting, and that frequently when all other remedies fail. It is supposed to be most useful:

- 1st, In cases, in which pain at the stomach is the leading symptom;
- 2d, When gastrodynia is attended with water-brash;
- 3d, When excessive irritability of the stomach produces vomiting;
- 4th, In those disorders of the stomach which in their symptoms resemble affections of the heart.

It is more homœopathic to venous congestion of the stomach than to inflammation; also more homœopathic to cramps of the stomach than to neuralgia, or atony.

It is supposed not only to possess a remarkable power in allaying morbid irritability of the stomach, but also to induce a slower and more healthy secretion of gastric juice.

Still Pereira says some of its effects are those of an *irritant*: such as the acrid impression made by the vapor on the nose and mouth; the salivation; the vomiting and purging; and the redness of the stomach. (11.)

Abdomen.—Occasional rumbling of the bowels, followed by a sense of heat throughout the abdomen; colic pains in the abdomen; pain in the region of the right kidney. (4.) Tympanitic distention of the abdomen. (2.)

PATHOLOGY.—Villous coat of the duodenum, reddish brown, friable, and easily detached.—Villous coat of intestinal canal covered with a reddish mucus.—Injection of the veins of the intestinal mucous membrane. (4.)

Clinical Remarks.—It is one of the most homœopathic remedies to venous plethora of all the the abdominal organs, especially to venous congestion of the stomach, liver, spleen, and whole portal circulation. (11.) Pereira found it curative against a most excruciating pain in the bowels, commencing daily at 2, P.M., and ceasing only at night, lasting for two months, and, apparently caused by fever and ague; one dose effected a cure.

Stool.—Involuntary discharges from the bowels. (4.)

Involuntary Stools in bed. (27.) Colic and diarrhœa. (28.)

Clinical Remarks.—In Asiatic or malignant cholera it has occasionally appeared to be successful; it is the most homœopathic remedy in the stage of collapse. Pereira has found it useful in checking the diarrhœa of phthisical subjects when Log-wood, Chalk, and Opium had failed.

Liver and Spleen.—A large quantity of dark violet-colored blood in the liver and spleen; liver and spleen brittle. Joerg noticed in the mesentery of a frog, poisoned with Prussic-acid, that the circulation first in the veins became slower, then that in the arteries; finally the mesenteric arteries became paler and almost empty, while the veins became fuller, and the blood darker and almost violet-colored. In two

cases, Mertzdorf noticed that the bile and gall-bladder had a blue tint. Spleen gorged, soft and puliaceous.

Urinary Organs.—Retention of urine. (1.) Increased flow of urine, with a slight burning in the urethra; involuntary discharges of urine. (4.)

PATHOLOGY.—A large quantity of dark, violet-colored blood in the kidneys, much softened, and then veins gorged with black blood.

Genital Organs.—Nocturnal pollutions. (27.)

PATHOLOGY.—Scrotum blue and deprived of epidermis here and there; penis in a state of semi-erection, with indications of seminal or prostatic discharge. (1.)

Clinical Remarks.—In *gonorrhœa*, injections containing Prussic-acid have been employed with benefit; Schlegel has also tried the cherry laurel water with the same result.

The writer has cured one case of intermittent neuralgia of the left ovary with the 6th dilution, repeated every two hours during the intermissions, after many other of the usual remedies had failed. The paroxysms had been of daily occurrence for more than four weeks, and were entirely cured after two days. (10.)

Larynx and Chest.—Inflammation of the larynx; feeling as if the larynx was swollen; tightness of the chest; asthma; acute sticking pains in the chest. (1.) Respiration difficult and rattling; dyspnœa, accompanied by very marked *râle*; cough, with a slight expectoration of a lightish yellow opaque mucus. Three days after the dose, the patient experienced all the symptoms of an intense pulmonary catarrh. Troublesome paroxysms of cough; catarrhal symptoms increased by the use of cold drinks; cough and dyspnœa worse on lying down in the evening. (2.) Scraping in the larynx and trachea; increased secretion of mucus easily thrown off by coughing; tightness across the chest; stitches in the chest on taking a deep inspiration; dryness in the mouth and larynx; dry cough; lancinating pains in both sides of the thorax, with difficult respiration; palpitation of the heart, with fleeting stitches in the cardiac region; scraping and tickling in the throat; lancinating pain on the right side under the false ribs; respirations and pulsations of the heart rapid. (4.) Respiration feeble, intermittent; respiratory murmur scarcely perceptible by auscultation; respiration sometimes very strong and sometimes intermittent; painful and accelerated respiration. (27.)

Clinical Remarks.—Dr. Rosenberg recommends Ac.-hydroc. in true and sthenic cases of pneumonia; pneumonia in phthisical persons; in sub-inflammatory, so-called florid phthisis; in violent inflammations of the lungs after venesection, in the stage of grey hepatization, with stinking purulent expectoration; also in pneumonia chronic, with pleuritis and emphysema of the lungs; in pneumonia notha, in young, very irritable persons, with phthisical disposition, attended with cough,

dryness in larynx, scratching in the trachea, deep groaning respiration, oppression of the chest, and stitches of pain from deep inspiration.

Ac.-hydroc. and its analogous remedies deprive, according to the provings of Magendie (*Leçons sur le phenom. physiques de la vie*, vol. IV.) the blood of the power to coagulate, and change it to a tar-like mass or raspberry-juice fluid, producing extravasation in the lungs, or obstruction in the capillary vessels; whence arise symptoms of obstruction, and paralysis of the circulation, such as is manifest in cholera, typhus, &c., characterized by terrible anxiety, great oppression of the chest, slow, weak, anxious and rattling respiration; convulsive drawing together of the trachea; gelatinous, blood-streaked expectoration; weak, imperceptible pulse, rolling of the eyes; enlarged, insensible pupils; blue, cold skin; absence of all pain.—(Müller.—*Hom. Vierteljahrsschrift*, Vol. 2. p. 111.)

A woman, about 25 years old, had been sick for sixteen days without medical aid; the whole right lung, except a small place under the clavicle, was apparently in the stage of grey hepatization; the expectoration so fetid that it infected the whole room; there was rapid failure of strength. Ac.-hydroc. was given in small, and often-repeated doses, (viz., $\frac{1}{4}$ gr. Amygdalin) and in three days her life was out of danger. (Dr. Liedbeck—*Hom. Vierteljahrsschrift*.) 2. Band.

PATHOLOGY.—A quantity of blood in the trachea.—Larynx, trachea, and lungs of a violet color, and filled with violet colored blood.—Lungs heavier, firmer, denser than natural, reddish, dotted with black points, and filled internally with a blue black blood of an oily consistence.—Lungs not entirely collapsed; rather hepatized; general distention of the veins of the lungs with black blood.

Clinical Remarks.—The effects upon the respiratory and circulatory organs, are owing to the influence of the acid over those parts of the nervous system from which the respiratory organs and heart derive their power. As a remedy, therefore, it is especially appropriate in spasmodic affections of the respiratory apparatus, like asthma, hooping-cough, and other coughs dependant upon a morbid condition of the nerves supplying these organs. We have found the 12th dilution of great service in phthisis, where the cough has been very troublesome, with thick purulent expectoration, and the patient has become quite emaciated, weak, and nervous from hectic. We have seen its good effects also in asthma and hooping cough, after other remedies had been prescribed without any material benefit. The acid cured in two weeks, in the hands of Frank, phthisis pituitosa with the following symptoms, violent cough, with copious purulent expectoration, pressure in the region of the heart, wandering pains about the thorax, headache, furred tongue, high fever, dry skin, sleeplessness. The same physician has cured with it many severe cases of tussis hectica, and asthma spasticum.

The specific action of this remedy on the chest is exceedingly well marked; the breathing is very apt to become labored and oppressed.

and the chest heavy and full, even before the stomach suffers, and in most cases the immediate cause of death is obstruction of respiration. It is most homœopathic to venous congestion of the lungs. It is the best remedy against the *Epilepsia thoracica* of Schoenlein; in this affection the patient becomes oppressed towards evening, or is awakened from sleep by the feeling of great constriction and oppression of the chest, so that he breathes violently and pantingly, but without sharp pain; this feeling of constriction commences at the ensiform process, and spreads itself from thence over the chest, often attended with the feeling of an ascending aura; the attacks last from fifteen minutes to half an hour, and are followed by a spasmodic cough, which expels but little mucus; or the aura arises to the head and the patient becomes dizzy. Finally convulsions set in. (11.)

Dr. Chapman suggests it as homœopathic to pulmonary apoplexy.

In the last stages of cholera when diarrhœa has ceased and the vomiting has decreased, when there is anguish with pressure on the chest, and the patient becomes cold, with gradual extinction of the pulse, Prussic-acid deserves a trial.

Superior Extremities.—Coldness of the extremities. (2.) Trembling of the right hand; convulsions of the extremities. (27.)

Clinical Remarks.—It is one of the most homœopathic remedies to *epilepsy*. It is indicated against the sudden loss of consciousness, and violent convulsions, with venous congestion of internal organs, and blueness of the surface which attend this disease. (11.)

Inferior Extremities.—Coldness of the extremities; convulsions of the extremities; trembling of the extremities. (27.)

Skin.—Slight heat of skin on the second day, becoming hot and dry on the third day; face slightly swollen. (2.) Prickling of the skin. (4.)

Clinical Remarks.—Frank cured in two weeks one case of herpetic eruption of two years' standing on the *mons veneris*, in a lady fifty years old, by the external use of the following lotion:—Acid.-Hydrocyan. ʒjss. and alcohol ʒiv.

Sleep.—Irresistible and constant drowsiness, or sleeplessness. (1.) Deep and prolonged sleep; yawning; inclination to sleep; inability to sleep; sense of great fatigue, without being able to sleep soundly. (4.) Sleepless and agitated during the night. (27.)

Clinical Remarks.—In obstinate cases sleeplessness consequent upon morbid excitement of the nervous system, or upon intense mental excitement, this drug is a remedy of marked power.

Fever.—Pulse small and almost imperceptible in the left wrist; increased fullness of pulse on the second day; catarrhal fever on the third day, with hot and dry skin, cough, great oppression and difficulty of breathing, face red and swollen, aggravation of the symptoms by using cold drinks; evening fever, with heaviness and pain in the head,

sore throat so as to be unable to swallow drinks, inability to sleep, short fatiguing cough. (2.) Creeping sensations; creeping chills of short duration; great heat; great tendency to perspire; pulse variable. (4.) Pulsations of the heart and arteries, sometimes accelerated, sometimes slower than natural, and sometimes intermittent, but always feeble; heat, thirst, anorexia, sleeplessness, great lassitude, and pulse 100 per minute; gay delirium, with accelerated pulse; paroxysms of coldness and trembling with pain in the head, sleeplessness, painful respiration, rapid and very small pulse. (27.) Vascular system sometimes affected very much, at other times not at all. Some patients only feel warmth in the epigastrium; in others this warmth arises to the face, in the form of flushes, attended with dizziness, and heaviness of the head; in others the feeling of warmth became general, and was attended with palpitation of the heart.

Clinical Remarks.—Hydrocyanic-acid was formerly regarded as a remedy of peculiar efficacy in inflammatory fevers; but the more recent researches of Hahnemann, Orfila, Christison and others, have demonstrated that it possesses no control over affections of a purely inflammatory character. In hectic fevers, and in feverish conditions accompanying catarrh, asthma, whooping cough, &c., it is a valuable remedy in virtue of its specific action upon the nerves of the parts involved. It is much more homœopathic to venous-congestions and inflammations than to arterial.

Heart and Arteries.—The arteries and left cavities of the heart empty; the veins and right cavities distended with fluid blood. In some cases death is caused by stoppage of the heart's action, although in experiments upon rabbits the heart has still been found beating on opening the chest. The venous system is usually gorged with blood, the blood in many cases being fluid, dark, or bluish black, or viscid or oily. Dr. Meyer found on putting a ligature around the large vessels close to the heart that Prussic-acid produced no effect. It only acts when taken into the circulation and then *paralyzes* the heart.

Clinical Remarks.—In *hypertrophy of the heart*, Hope advises Prussic-acid as a palliative, in doses of two or three drops, two or three times daily; it requires to be steadily persevered in. In *nervous palpitations*, or those arising from debility it has been found useful. In *angina pectoris* it has been successfully employed by Brugnatello, Granville and others. Dr. Schlessier relates a very severe case, which, after resisting all other remedies, yielded immediately to Prussic-acid. Dr. Chapman, of London, suggests it as a homœopathic remedy for *angina pectoris*, and refers to the many deaths reported in the newspapers, said to have been from spasm of the heart, without any organic lesion being found after death: Dr. Arnold, Lord George Bentwick, Horace Twiss and others died thus. (11.)

Blood.—The blood is every where fluid, so that two pounds have flowed from an incision in the scalp, and twelve ounces from that of the dura-mater; it has had a glimmering bluish appearance as if

Prussian-blue or Cochineal had been mixed with it. It was perfectly fluid every where in the bodies of the seven epileptics poisoned with it at Paris. Only in rare instances has the blood coagulated after flowing from the body, or been found coagulated in the heart. The state of the blood reminds one of that after a person has been struck with lightning. It seems merely to depotentize the blood and render it venous, not to cause any dyscrasia in it. Hence it probably will not prove curative in dyscrasias, such as tubercle, cancer, &c. It may be homœopathic to the blood disorder in cholera, as the blood then is often found to be of the color and consistence of treacle. (11.)

Nervous System.—Pereira thinks that the parts most specifically affected by this acid are the brain and true spinal system. The pain in the head, insensibility and coma are evidences of the cerebral affection; while the tetanic convulsions depend upon a disorder of the true spinal system. Whatever may be the precise pathological condition of the brain and spinal cord it is *probably identical with that which occurs during an epileptic paroxysm*. Dr. Meyer of Tübingen instituted a number of experiments with Prussic-acid to ascertain if possible, with absolute certainty its exact mode of action. He proved that it paralyzes the extremities of the nerves it comes in contact with, i. e. deprives the part of sensation and motion, thereby causing passive congestion, and exudation from paralysis of the capillaries.

General Symptoms.—Catalepsy. (1.) Towards evening a feeling of exhaustion, especially in the lower extremities; dynamized motive power; great exhaustion, with yawning and great inclination to sleep, contrary to his usual custom; on being aroused from sleep, great confusion of the head, and inability to keep awake; desire to sleep late in the morning; lassitude and exhaustion of the whole body; soon after taking an over-dose, falling senseless to the ground; violent vertigo and chilliness, trembling of the limbs, vomiting; difficult respiration; intoxication with signs of fainting; paralysis; convulsions; icy coldness of the extremities; trunk stiff and bent backwards; symptoms better in the open air. (4.)

ACIDUM MURIATICUM.

MURIATIC ACID.

TOXICOLOGICAL EFFECTS.

Very little is known concerning the action of this acid as a poison; but one case is reported by Orfila, and of 527 cases of poisoning there was not one in which this acid was used. The grosser symptoms do not vary from those of the other mineral acids.

There is the same sensation of burning heat from the throat to the epigastrium, with vomiting of a highly acid liquid of a dark green

color, mixed with mucus and altered blood; the tongue becomes swollen and dry; there is much thirst and great difficulty in swallowing; and the chief seat of the pain may be in the throat and fauces; the pulse has been observed to be small, frequent and irregular; the skin cold and clammy; the intellectual faculties generally remain clear until death. (11.)

PATHOLOGICAL APPEARANCES.—The fauces, larynx and œsophagus highly inflamed, the mucous membrane lying in detached masses, or actually sloughing away; in one case the mucous membrane was thickened.

The coat of the stomach so much corroded in many places that only the peritoneal tunic is left, and in attempting to raise the organ, the parietes gave way.

The contents of the stomach are sometimes yellowish, at others of a dark green color; the gall bladder has been found of a grass-green color from the well known action of this acid on the bile.

The lining membrane of the stomach has been found of a black color, presenting a charred appearance; the blackening extending through the duodenum in its whole length, especially on the valvulæ conniventes; the intervals being stained of a greenish-yellow color from the action of this acid on the bile.

When death does not take place for several days, the stomach is highly inflamed, and for the most part in a state of sloughing; large shreds of membrane may be hanging down, especially about the pylorus.

Remarks.—It is evident that this and other mineral acids are the most homœopathic remedies for the most intense ulcerative-, sloughing-, and phagadenic-inflammation; in malignant typhus and scarlet fevers; bad forms of syphilis; gangrenous stomatitis; putrid sore-throat; cancrum-oris; gangrenous ulceration of the genital organs, &c.

Antidotes.—Same as for the other mineral acids. (11.)

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PHENOMENA.

Sensorium.—Vertigo in the open air, and unsteady gait. (1.) Giddiness; intoxication; stupor. (3.)

Clinical Remarks.—In Frank's Magazine we find several cures reported by this acid, of convulsions preceded by buzzing in the ears and vertigo. The convulsions were severe, and after having lasted for several hours, were arrested by a few drops of the diluted acid. (10.)

Mind and Disposition.—Out of humor; irritability; most irritable in the evening. (1.)

Clinical Remarks.—It is recommended against melancholy and great sadness, when arising from or attended with great acidity of the stomach, bilious derangement, dyspepsia, &c. (11.)

Head.—Tearing pain in the right parietal bone; tensive pain in the right temple; boring pain in the vertex; feeling as if the brain were loose; burning feeling in the head. (1.)

PATHOLOGY.—Blood vessels of the brain very much injected, and the ventricles distended; the arachnoid thickened and opaque; the pia-mater very much injected: a large quantity of serum between the convolutions of the brain. (45.)

Clinical Remarks.—The 1st dilution of Muriatic-acid has often proved curative in our hands in the headaches which so often accompany chronic hepatitis. Also in the dull and stupifying headaches which occur in the progress of typhoid and scarlet fevers, it has not unfrequently displayed excellent curative effects. (10.)—This remedy is infinitely more serviceable in headaches, inflammation of the arachnoid, and dropsy of the brain than Nitric-acid, which is used much more frequently by many physicians. (11.)

Scalp.—Pustules on the forehead and temples; pimples on the forehead, rapidly forming a scurf. (1.)

Clinical Remarks.—Frank reports one case of *Herpes furfur*. extending over the scalp and face, cured in five weeks by the acid, after Sulphur, Mercurius, Dulcamara, &c., had failed. In our own practice, two cases of porrigo of the forehead, attended with intense burning itching, and running rapidly into the scaly desquamation, were cured in six weeks by the alternate use of Muriatic and Sulphuric-acids, at the 3d dilution. Both of these patients had been for many years sufferers from gout and liver derangements; a complication with which porrigo and eczema are almost invariably accompanied. (10.) Mack recommends it against humid, suppurating and scurfy eruptions; against pimples on the forehead, finally running together into a scurf; but we have found Nitric-acid more useful. (11.)

Eyes.—Itching in the eyes; slight inflammation of the eyes; burning in the eyes on washing them; one-half of every object appears to be cut off from the other half in a perpendicular line; twinkling before the eyes. (1.) Eyes red, and sparkling. (2.)

PATHOLOGY.—Injection of the vessels of the conjunctiva. (2.)

Clinical Remarks.—High dilutions of the acid have been successfully employed by us in chronic inflammations of the edges of the lids, remaining after scrofulous ophthalmia. It has likewise proved curative in eczema of the lids, eye-brows, and forehead. (10.)

Ears.—Hardness of hearing; hearing morbidly acute, (secondary effect); frequent tingling, humming and whizzing in the ear; ears sensitive to noise; tearing in the left ear; itching pimples upon both ears: heat and dryness in the ears; ulcerative pain in the left ear, aggravated by boring with the finger. (1.)

Clinical Remarks.—The writer has occasionally prescribed Muratic-acid in effections of the ears accompanying malignant scarlatina. It has proved most efficient in gatherings in the ears; attended with hardness of hearing, tenderness of the external ear to the touch, severe ulcerative pains, ringing, and slight sero-purulent, acrid discharges from the ears. We have seen good effects from this acid in the deafness, and ringing in the ears accompanying typhoid fevers. In these instances, other symptoms have corresponded. In two instances, herpetic eruptions about the ears, have disappeared under the prolonged use of the 30th dilution. (10.) A weak dilution may occasionally be dropped into the ears; Nitric-acid seems to act more specifically upon the eyes; Mur.-acid. upon the ears.

Nose.—Frequent sneezing; Coryza; frequent bleeding of the nose; stinging pains in the nostrils; violent itching of the tip of the nose; obstruction of the nose; acrid or corrosive discharge from the nose, or obstruction of the nose with dryness. (1.)

Clinical Remarks.—In malignant scarlet fever with acrid and corrosive discharge from the nose, fetid breath, disposition to bleed from the nose, obstruction in the nose, soreness and blisters around the nose and mouth, redness of the eyes, gatherings in the ears, faint, darkish eruption, mixed with petechiæ, ulcers in the throat ash-colored or bluish, the drug under consideration is a remedy of the highest importance. We can recall to mind a number of cures of the above group of symptoms with this medicine. In these cases, where the vitality has become very much depressed, we have been in the habit of using the first dilution, each dose in a table-spoonful of water. (10.) It has been recommended against bleeding from the nose; great dryness, obstruction and thick scabs in the nose; ulceration, fissures and scurfiness of the nostrils. (11.)

Face.—Pimples on the face; pinples around the lips; vesicles around the mouth; burning of the lips; rough borders of the lips, with dry, cracked skin. (1.) Animated expression of the face; bluish color of the lips. (2.)

Clinical Remarks.—Van Swieten has employed the diluted acid with benefit, as an external application in cancrum-oris. We have frequently used water acidulated with it, as a lotion to allay the intolerable itching and burning of porrigo, eczema, and lichen. Used in this manner, it never repels the eruption, or gives rise to any unpleasant secondary effects. It is particularly appropriate when the remedy is being administered internally for the same malady. He commends its internal use in obstinate eczema attacking the face, and in herpetic eruptions appearing in the whiskers and around the ears. In these cases we are accustomed to prescribe the higher dilutions. (10.) It is useful against acne and other pimples and pustules upon the face; freckles; and ulceration and scurfiness of the upper lip. (11.)

Mouth.—Slight inflammation of the gums; swelling of the gums;

scorbutic gums; tearing pain in the right upper teeth; copious saliva in the mouth. (1.) Tongue very red and dry; lips darkish. (2.)

PATHOLOGY.—Tongue brown, thickened, hard and dry; lips darkish; ulcerated spots on the mucous membrane of the mouth. (2.)

Clinical Remarks.—Properly diluted this acid forms an excellent application for ulcers in the mouth arising from abuse of Mercury or from disordered stomach. It is a valuable internal remedy in ulcers of the mouth occurring as symptoms of scarlet and typhoid fevers, provided other phenomena are homœopathic. We have already alluded to its use in cancrum-oris by Van Swieten. In scorbutic affections of the gums it has been used with advantage, both internally and locally. (10.) It is recommended against inflammation and swelling of the gums; scurvy of the gums; salivation; but more especially against diphtheritis of the mouth and fauces. It is indicated in all typhoid and malignant fevers, when the tongue becomes dry, brown and parched. (11.)

Pharynx.—Rawness and smarting of the fauces. (1.) Redness of the throat; ulceration of the throat. (10.)

PATHOLOGY.—Pharynx and œsophagus of a purple red color, and excoriated in two or three places. (2.)

Clinical Remarks.—This is one of our most valuable medicines in the greyish or purple and fetid ulcers of the throat occurring in malignant scarlatina. Above we have detailed the other symptoms which correspond with the drug pathogenesis. We have cured with it a few cases of troublesome ulcerations, of long-standing, appearing in individuals of impaired constitutions, and in persons of a scrofulous dyscrasia. In several cases of this description we have likewise failed of affording any relief. (10.) It is one of the most homœopathic remedies to that croupous inflammation of the pharynx which is apt to descend into the larynx and trachea causing true croup; or to travel down the œsophagus to the stomach. (11.)

Taste, Appetite and Gastric Symptoms.—Bitter taste; acrid and putrid taste; aversion to meat; hiccough before and after eating; frequent eructations. (1.) Hiccough; efforts to vomit; vomiting of yellowish fluids. (2.)

Clinical Remarks.—In some forms of dyspepsia, Muriatic-acid holds a high rank as a curative agent. Pereira notices two facts connected with it, which give it a marked interest as a dyspeptic remedy: viz., its power when mixed with mucus, as a solvent or digester of various articles of food, and the fact of its being a constituent of healthy gastric juice. Our own experience has been confined to cases of indigestion in connection with scrofulous and other chronic ulcerations of the mucous membrane of the mouth, pharynx and œsophagus. In these instances we have now and then used a dilution of the acid with decided advantage. (10.) A very interesting cure of convulsive eructations is reported in Frank's Magazine. A man 60 years of age, subject to rheumatic and catarrhal complaints, took cold and was affected as follows: violent and tasteless eructations, lasting

sometimes for twelve hours, constant flow and spitting of saliva, violent thirst, without heat, impaired appetite, constipation, pressing pain in the chest, worse in the left side, sensation of coldness in the abdomen, rumbling in the bowels preceding the eructations, nausea, great weakness, faintness, cold feet, wandering pains in the head, knees, feet, &c. Every movement of the chest or body brought on an attack. After having taken a great variety of allopathic medicines, for a period of several months, without relief, this patient was promptly cured with a few doses of diluted Muriatic-acid. (10.)

In some forms of dyspepsia Muriatic-acid will have to be assisted or alternated with Lactic-acid; this acid has been incontestibly proven to be an important ingredient of the healthy gastric juice—it is a colorless, syrupy liquid having a very sour taste; it coagulates albumen, and dissolves a large quantity of freshly precipitated phosphate of lime, properties which render it of great importance to the animal economy. It has been proposed by Magendie as a remedy in certain forms of dyspepsia, and for the removal of phosphatic deposits in the urine. (11.)

Hypochondria.—Burning tension in the right hypochondrium; stitches in the left hypochondrium, when stooping; stitches in the left side, under the ribs.

PATHOLOGY.—Congested appearance of the liver; green tint of that portion of the gall-bladder in contact with the stomach. (2.)

Clinical Remarks.—Muriatic-acid has long been employed, in tropical climates, especially in chronic hepatitis. It is usually prescribed both internally, and as a constituent of the Nitro-muriatic-acid bath. We have been in the habit of using this remedy internally and externally in obstinate cases of this description, and for the most part with satisfactory results.

Stomach.—Empty feeling in the stomach and œsophagus; pressure in the stomach; feeling of repletion in the stomach; heat and burning in the stomach. (1.) Violent pains in the epigastric region; heat and burning in the stomach. (2.) Sensation of warmth in the stomach. (3.)

PATHOLOGY.—Stomach thickened and inflamed on its external surface; on its internal surface, the mucous membrane may be detached in layers, with the greatest facility, throughout its whole extent, and presenting in its *cul-de-sac*, gangrenous patches. (2.) In another case the stomach appeared to be charred, and the gall-bladder presented a green tint at the part where it was in contact with the stomach. (3.)

Clinical Remarks.—Chronic gastritis, with heat and burning in the stomach, frequent nausea, vomiting of solid food soon after ingestion, great thirst, sense of fullness in the stomach, or empty and constrictive feeling in the stomach, has often been removed by this remedy. The nausea and vomiting of pregnancy has often been either much relieved or entirely cured by this remedy. (10.) It is an important remedy in some of the most severe and hopeless diseases of the stomach (see page 37.)

Abdomen.—Colicky pinching in the abdomen; colic early in the morning in bed; violent cutting, with pinching in the abdomen, when standing or walking, going off when sitting; distention of the abdomen; feeling of repletion in the abdomen after a moderate meal; rumbling in the abdomen; pinching in the abdominal muscles; empty feeling in the abdomen. (1.)

PATHOLOGY.—Thickening of the duodenum; jejunum perforated by a worm, which had found its way into the cavity of the abdomen. (2.) Charred appearance of the duodenum; green tint of that portion of the gall-bladder in contact with the stomach, (from the action of acid on the bile?). (3.)

Clinical Remarks.—In flatulent distention of the stomach, with rumbling and colic pains,—especially on standing upright or walking, we have sometimes witnessed good effects from the 12th dilution of the acid. (10.)

Stool.—Stool in small pieces, with straining; inactivity of the rectum; hard, difficult stool, alternating with soft-stools; diarrhœa with burning at the anus; itching of the anus and rectum; swelling of the varices of the rectum, with burning sore pain; blood with the stool; itching in the perineum. (1.) Relaxed state of the bowels. (3.)

Clinical Remarks.—Against several varieties of bowel complaint, Muriatic-acid is a remedy of decided value. With it we have cured several obstinate cases of chronic diarrhœa, attended with tenesmus, colic pains before stool, burning at the anus, stools occasionally bloody, prolapsus of the rectum after stool. It has also cured several cases of diarrhœa, with soft clay-colored stools, alternating with hard and difficult stools. It is likewise a favorite and efficient medicine in certain forms of diarrhœa accompanying typhoid and scarlet fevers. Our own experience points most strongly to the following indications in these fevers, scanty, loose, and bloody stools, with rumbling in the abdomen, colic pains before and during the discharges, tenesmus, burning at the anus, chilliness and prostration after each stool. (10.) It is quite as useful as Nitric-acid against prolapsus-ani, and blind and flowing piles, with burning soreness.

Urinary Organs.—Frequent desire to urinate, with small emission, and tenesmus of the bladder afterwards; frequent desire to urinate with profuse discharge; profuse and pale-yellow urine; slow emission of urine. (1.)

Clinical Remarks.—The old school prescribe Muriatic-acid to counteract phosphatic deposits in the urine. It is homœopathic in slight cases of chronic hepatitis, when the urine is pretty copious and tinged with bile. In one case of vesical tenesmus with frequent desire to urinate, accompanying a case of bilious diarrhœa, Muriatic-acid at the 2d dilution effected a prompt cure. (10.) In some cases of Oxalic-acid diathesis, Prout prefers Muriatic-acid to any other remedy; also in the Cystic-oxide diathesis; Bulman cured a case of phosphatic calculus by injecting into the bladder, two drops of Muriatic-acid to

four ounces of water, always taking care to wash out the bladder previously with warm water. It has cured ischuria; frequent desire to urinate with profuse discharge of urine; diabetes; weakness and paralysis of the bladder. (11.)

Genital Organs.—Itching of the scrotum; leucorrhœa.

Clinical Remarks.—Heare prescribed the acid at the 12th dilution in several cases of itching eruptions upon the scrotum and inside of the thighs. It has proved serviceable in one case of lichen, and in one case of porrigo. We have also administered it in cases of leucorrhœa, but with much less satisfactory results than we are accustomed to witness from the use of the Nitric-acid. (10.) Zeller of Vienna first used it in syphilis: Pearson found that it would radically cure the disease, but ascribed the benefit derived from it to its *salutary* action upon the stomach and constitution, and also to its agency on the ulcers of the throat and tongue as a local application. Rust of Vienna cured several hundred cases, without the aid of a single grain of Mercury; but he failed in every case in which a full diet was allowed; low diet is essential, and large doses, viz., one drachm per day in two pints of Barley-water. (11.)

Larynx.—Hoarseness; loose cough with mucous expectoration morning and evening. (1.)

Clinical Remarks.—Frank advises the acid in some forms of *tussis convulsiva*. He thinks it appropriate when the paroxysms of cough, terminate in vomiting, and throwing up of large masses of a whitish matter, looking like bread dissolved in water or milk—probably decomposed gastric juice. He has also found it curative in cases unattended by vomiting, but where every attack was so violent as to threaten suffocation, and reduce the patient almost to a condition of tetanus (10.) It has been advised against œdema glottitis; chronic hoarseness, with soreness of the chest. (11.)

Chest.—Oppression across the chest; deep breathing; sticking pain in the chest; boring stitch in the intercostal muscles of the right sidé; stitches in the region of the heart; sticking pain in the chest during motion or inspiration; violent beating of the heart. (1.)

PATHOLOGY.—Muriatic-acid does not exercise any specific action over the lungs; but has a general specific action upon the mucous membranes. In virtue of this action it is prescribed in certain affections of the mucous membrane of the air passages.

Clinical Remarks.—In the last stages of chronic bronchitis and catarrhal consumption, when hectic symptoms are marked and there are copious expectorations, irritating spasmodic cough, diarrhœa and profuse night sweats, this acid is often prescribed with benefit. (10.)

Back.—Violent stitches in the left side of the back; stitches in the scapula; aching pain in the small of the back, when standing or sitting. (1.)

Clinical Remarks—This medicine will do good in the aching pains in the back, arising from diarrhœas and prolapsus-ani. (10.)

Superior Extremities—Drawing in the left upper arm; frequent drawing tension in the elbow-joint; itching and burning blotches on the fore-arms and elbows; itching eruption upon the hands; cramp-like tearing pain in the upper arm.

Clinical Remarks.—In psoriasis between the fingers, eczema of the hands and fore-arms, and in itching blotches covering the arms we have prescribed the acid with advantage. (10.)

Inferior Extremities.—Sticking with pressure in the muscles of the left thigh, only when sitting; weakness of the thighs and wandering gait; itching herpetic spots on the inside of the thighs; swelling of the knees; frequent tearing in both tibiæ; coldness of the feet; itching stitches in the feet, worse when at rest; swelling and redness of the toes; throbbing pain in the toes. (1.)

Clinical Remarks.—We have cured one case of violent porrigo upon the inside of the thighs with the 12th dilution of this acid. (10.)

Sleep.—Difficulty of falling asleep; drowsy in the afternoon; frequent waking at night; waking every morning at four, and inability to fall asleep again; nausea and distention of the abdomen, early in the morning when in bed; sleeplessness in the early part of the night; anxious dreams. (1.) A slight degree of stupor. (3.)

Clinical Remarks.—Drowsiness arising from bilious derangement, is often relieved by the acid. Good effects have also followed its use in three cases of drowsiness occurring as symptoms of Bright's disease of the kidneys. In these last instances, the relief was only temporary.

Fever.—Chilliness; chilliness with thirst, dry mouth and burning face; heat of the body with inclination to uncover; night sweats; feverish shuddering. (1.) Pulse frequent and full, face animated eyes red and sparkling, severe headache, violent delirium, skin hot and dry, tongue red, lips bluish, hiccoughs, nausea and vomiting. (2.)

Clinical Remarks.—We esteem this drug a valuable remedy in certain stages of typhoid and scarlet fevers. The following symptoms which not unfrequently occur during the progress of *typhoid fevers*, point to its use: great prostration, occasional or constant delirium, rapid pulse, red and dry tongue, or dark and dry tongue, dull, confused pain in the head, stitching pains in the side, disposition to settle down in bed, slaving, digging with the head into the pillow, depression of the lower jaw, looseness of the bowels. In *malignant scarlatina*, the following group of symptoms indicate the employment of Muriatic-acid; purple color of the cheeks, bluish lips, lips dark, dry and cracked, tongue red and moist, or dark and dry, pulse very rapid, lethargic state, with delirium, eyes red and suffused, great prostration, diarrhœa, irregular, faint eruption, becoming dark red, and mixed with petechiæ, dark or greyish ulcerations of the throat,

fœtid breath, acrid and fetid discharge from the nostrils, soreness and blisters around the nose and lips, coldness of the extremities, occasional shuddering hiccough. (10.) This remedy is applicable in *hectic fever* with frequent shudderings during the day, and profuse night sweats in the morning in bed. While experiencing the chilly sensations the patient has great heat and burning in the cheeks, rapid pulse, dryness of the mouth, and thirst. (10.)

Huss of Stockholm found it highly serviceable in typhus fever, particularly in cases attended with cerebral symptoms (see head); its employment was not contra-indicated by the state of the tongue or stomach; it was useful whether the tongue was loaded or not, red and fissured, moist, or *parched*; it was also given whether the abdomen was painful or not, tense or flaccid, and both when there was constipation or diarrhœa. If the doses were too large it always aggravated bronchial or pulmonary congestion. (11.)

In the *continued fevers of children*, West found it useful in the advanced stages, after the second week, when the vital powers were much depressed; if he had used it earlier, he would have been still more successful. (11.)

Skin.—Stinging itching in various parts of the body, relieved by scratching; stitches in the skin at different parts; ulcers on the skin; titillating, prickling itching of the skin, relieved only temporarily by friction. (1.) Skin burning and dry; or cold and clammy. (2.)

PATHOLOGY.—The only morbid appearances which have been observed upon the skin in cases of poisoning, are, a bluish tinge of some portions of the surface, œdematous state of the feet and ankles. Manufacturers of the article have been occasionally afflicted with painful ulcers of the skin, in consequence of inhaling the vapors arising from the acid during the process of manufacture. (10.)

Clinical Remarks.—Itching eruptions of the skin have sometimes been cured by this drug. It is in these cases of eruptive disease in which a marked alkaline condition is found, that the remedy has been found most beneficial. It has been used in the old school as an external application to sloughing phagedæna, and in a diluted form, as a lotion to *cancrum-oris*. (10.)

General Symptoms.—Lassitude; vacillating gait, owing to weakness of the thighs; drowsiness; pains in the periosteum of every bone. (1.) Asthenic conditions; putrid, typhoid, and malignant forms of disease; hectic symptoms, with profuse loss of fluids by sweat and diarrhœa. (10.)

ACIDUM NITRICUM.

NITRIC ACID.

TOXICOLOGICAL EFFECTS.

From the *strong* acid, the symptoms come on immediately, and the swallowing of the acid is attended by the most intense burning pain in the fauces and œsophagus, extending to the stomach; there are gaseous eructations from the chemical action of the acid; swelling of the abdomen, violent vomiting of liquid or solid matters, mixed with altered blood and shreds of mucus, having a strong acid reaction. The abdomen is generally *exquisitely tender*. The mucous membrane of the mouth is commonly soft and white, after a time becoming yellow, or of a brown color; the teeth are also white, and the enamel is partially destroyed. There is great difficulty of speaking, as well as of swallowing; the power of swallowing is sometimes entirely lost. On opening the mouth, the tongue may be found swollen and of a citron color; the tonsils are also swollen and enlarged. The difficulty of breathing is sometimes so great as to render tracheotomy indispensable, especially in young subjects. As the case proceeds, the pulse becomes small, frequent and irregular; the surface of the body extremely cold, and there are frequent *rigors*. The deglutition of the smallest quantity of liquid increases the severity of the pain, and gives rise to a feeling of laceration or corrosion. There is obstinate constipation. Death takes place in from eighteen to twenty-four hours, and is sometimes preceded by a kind of stupor easily removed; the intellectual faculties commonly remain clear to the last. (11.)

Should the patient survive the first effect of the poison, the mucous membrane of the fauces and œsophagus is discharged either in irregular masses, or a complete cylinder of the œsophagial lining may come away. There is great irritability of the stomach, vomiting, and destruction of the powers of digestion; the patient becomes slowly emaciated, and dies from starvation or exhaustion.

Death may also be caused by inflammation and *œdema of the larynx*, with consequent suffocation. (11.)

CHRONIC POISONING.

Case 1.—A man aged 34, swallowed a wineglassful of Nitric acid, but the greater portion was immediately rejected by vomiting. An attack of acute gastritis followed, from which he apparently recovered; but about a month afterwards he had severe pain throughout the œsophagus to the epigastrium, and vomiting after taking food. He gradually sank and died in three months.

PATHOLOGICAL ANATOMY.—The pylorus was found so diminished in size, that its diameter did not exceed a line or two; and the duodenum was equally contracted for about one and a half inch from its commencement. The mucous membrane was softened and red in patches;

and *there were several cicatrices of ulcers*. The subjacent tissues were in a *scirrhus* state. (Taylor's Medical Jurisprudence.)

Case 2.—A man aged 52, drank two ounces of dilute Nitric-acid, followed immediately by violent pain and burning in the mouth, throat and œsophagus; then he vomited up the larger portion of the acid. On the next day the pains in the mouth and throat had increased; the inner surface of the mouth, throat and tongue were covered with white, easily-detached, and partly detached shreds of mucous- and false membrane. The palate and tonsils were swollen and painful; swallowing was very difficult, and liquids only could be got down. Respiration was much oppressed. The stomach was somewhat painful to the touch; the muscles of the abdomen very much contracted. The pulse small and tranquil; brain undisturbed; stool and urine natural. During the following few days he had attacks of violent pain in the stomach; but in the course of eight days his mouth and throat had improved so much that he could take a little food; still he became weaker, his appearance was worse, and he became emaciated; for two days before the final catastrophe he vomited his food several times and discharged some blood with his stools. On the fifteenth day, increased pain in the stomach sat in, with frequent attacks of nausea and anxiety, followed by violent vomiting of black and fluid blood, and of a broad membrane one foot in diameter; this membranous mass was putrid, black in patches, perforated in several places, and contained fibrous and large vascular ramifications. Soon after the vomiting he had stools containing a large quantity of black, offensive and putrid blood. After these evacuations the patient became miserable and weak, his pulse small and frequent, with increased pain in the stomach. In four days more he again vomited and purged black and offensive blood; he exhaled a most putrid odor; his limbs became cold; pulse small and very frequent; eyes dull, sight extinguished; still he lived and vomited blood from time to time for two days more, when he died.

PATHOLOGICAL ANATOMY.—The brain was healthy, with the exception of some opacity of the arachnoid, and considerable fluid in the ventricles.

The aorta and left side of the heart contained coagula.

The sharp edge of the liver was adherent to the colon; peritoneum natural. When the liver was raised an open cavity was exposed, which occupied the place of the stomach and extended from the duodenum to the œsophagus. The walls of this cavity were formed anteriorly by the concave surface of the liver, the colon and by shreds of the coats of the stomach; posteriorly by gangrenous, dissolved and putrid masses of stomach; to the left, by the spleen and portion of the coats of the stomach. Hence all that portion of the stomach which had formed the anterior wall, smaller curvature and part of the posterior wall had been vomited up several days before death; still the contents of the stomach had not passed into the cavity of the peritoneum.

The whole intestinal canal, especially the transverse colon was filled

with masses of blood; the entire mucous membrane of the œsophagus was gone, so that the muscular coat was exposed.

A similar case is reported in Vol. 1. p. 123 of this Journal.

Case 3.—In a somewhat similar case the patient lived three months; after an apparent recovery he relapsed in the sixth week from imprudence in diet; the pains in the œsophagus and stomach returned, also the nausea, vomitings, colics and constipation; he became very much emaciated, his face sunken and altered; putrid eructations and considerable distention of the epigastric region occurred; his tongue was pale and somewhat moist; breath offensive; pulse 66 to 68; skin natural.

Notwithstanding the use of various remedies his abdomen began to swell, especially about the left hypochondriac region, forcing the false ribs outwards, and forming a swelling which extended down to the navel. He lost strength rapidly; his pulse became very frequent and small; his tongue dry, and features pinched.

Notwithstanding his frequent vomitings the patient desired solid food. He finally died suddenly.

PATHOLOGICAL ANATOMY.—The stomach was found *enormously distended*, so that it not only filled the whole left hypochondriac region, but the whole left side of the abdomen down to the iliac fossa; still the walls of the stomach were generally not much thinned. There were several quarts of a thick chocolate-like, extremely offensive fluid in the stomach. Beside gastritis, there were ulcers of various sizes and various degrees of cicatrization, near the pylorus; some of these ulcers were an inch in diameter, with very thick and prominent edges.

The opening of the pylorus did not exceed one line in diameter; the walls of the pylorus and upper part of the duodenum were at least half an inch thicker than natural and quite hard; the cut surface of this indurated and hypertrophied portion presented a greyish white, and somewhat bluish appearance; its tissue was porky, and it creaked under the knife; hence it presented all the characteristics of *true schirrus* according to Audral.

Antidotes.—The poisonous action of Nitric-acid may be prevented by neutralizing it, but it acts so rapidly that if much time is lost in seeking an antidote, irreparable mischief may be caused before the remedy is taken. If *Chalk* or *Magnesia* can be administered without delay, they ought to be preferred; the plaster of house walls may be beaten down and made into a thin paste with water and used; a solution of soap is another antidote of no mean value; until either of these articles can be procured the patient should drink freely of any mild fluid which can be obtained, viz., of water, milk, sweet-oil, tea, coffee, in fact anything which will dilute the acid. As soon as *MAGNESIA* can be obtained it should be used; it has saved several cases in which as much as two ounces of Acid have been swallowed. Carbonate of Potash given in mucilaginous fluids, has the advantage over *Magnesia* that it may be administered in a small volume.

After the proper antidote has been given to a sufficient extent the use of diluents ought to be continued.

The treatment of the supervening gastritis does not differ from that of ordinary inflammation of the stomach.—CHRISTISON.

AUTHORITIES.

1. Hahnemann. 2. Orfila. 3. Pereira. 4. *Chrystison*. 5. Perry.
5. Frank's Magazine. (44.) Waring's Therapeutics.

PHENOMENA.

Intellect.—Intellect usually unimpaired; exalted imagination; indifference to life. (2.) Great weakness of memory; vertigo on rising. (1.)

Disposition.—Great anxiety and agitation; inexpressible *malaise*; irritability. (2.) Sadness; anxiety; excessive nervousness and irritability; angry and excited mood; indifference; hopelessness; despair. (1.)

Head.—Headache; congestion of blood to the head; pressure and heat in the head; painful tension in the interior of the head; stitching and darting pains in the left temple; headache as if the head were surrounded by a tight bandage; throbbing pains in the temples; throbbing headache in the left temple. (2.)

Clinical Remarks.—This remedy is used very largely by Dr. Gray in the treatment of chronic headaches.—It is to be hoped that he will soon communicate his experience to the world.

Scalp.—*Clinical Remarks.*—In baldness, a liniment of Nitric-acid and sweet-oil is useful; it should be slightly pungent but not acrid. It will also cure *Porrigo*. (44.)

Eyes.—Conjunctiva injected; eyes animated and haggard; eyes fixed; (2.) *Muscæ volitantes*; short-sighted.

Clinical Remarks.—It has been used successfully against inflammation of the cellular tissue about the eyes, when it has terminated in suppuration and ulceration. In ulceration of the cornea. In gonorrhœal ophthalmia. Opacities of the cornea. For Dudgeon's remarks on Nitric-acid in ophthalmia, see Brit. Journ. Hom. Vol. 6, p. 503.

Ears.—Difficulty of hearing; stitches in the ears; hardness of hearing from ringing in the ears. (1.)

Clinical Remarks.—It is a useful remedy against purulent otorrhœa.

Nose.—Soreness and scurf in the nose; violent bleeding of the nose; unpleasant smell in the nose. (1.)

Clinical Remarks.—It has been used successfully against scrofulous and syphilitic eczema, and against polypi of the nose. It is especially useful against the terrible affection of the nose which attends malignant scarlet fever.

Face.—Face pale; yellow spots upon the edge of the upper lip; convulsive motions of the muscles of the face; countenance pale and cadaverous. (2.) Small pimples on the face, especially on the forehead; pimples on the hairy border of the temple. (1.) Face pale and cold; face sunken. (6.)

Clinical Remarks.—It is useful against acne and erysipelas of the face.

Mouth.—Tongue of a light yellow color, dryness of the tongue; tongue yellow at its base and on its sides, and brown in the centre; tongue humid and natural. (2.) Throbbing toothache; looseness of the teeth; ulcers in the mouth and fauces; copious flow of saliva; soreness of the tongue; putrid smell from the mouth; bitter or sweetish taste in the mouth; great thirst. (1.) Violent pains in the mouth and œsophagus; mucous membrane of the mouth and tongue pale; ulcers in the mouth covered with yellowish-grey scabs emitting an offensive odor. (6.)

PATHOLOGY.—Mucous membrane of the lips, mouth and tongue of a very pale color, and much shrivelled; mucous membrane of the tongue detached in several parts. (6.)

Clinical Remarks.—It is homœopathic to salivation, ulceration of the mouth, cancrum-oris, and aphthæ.

Throat.—Severe pain in the throat, extending through the œsophagus to the stomach; burning heat through the œsophagus, into the stomach. (2.) Ulceration and dryness of the throat. (1.) Tonsils swollen; difficult deglutition; violent pain in the throat, with burning thirst; ulcers in the mouth and throat covered with yellowish grey scabs, emitting a foul odor; mucous membrane inflamed, swollen and painful; increased pain during deglutition in the œsophagus; rough voice; breath offensive. (6.)

PATHOLOGY.—Mucous membrane of the œsophagus detached in patches, and the muscular coat much inflamed. (6.)

Clinical Remarks.—The writer has cured one case of obstinate ulceration of the throat of long standing, with the 30th dilution of the acid. This case was non-syphilitic, and had resisted the venal allopathic routine of mercurials, Iodide of potash, &c., for many years.

It is especially useful against the horrible affection of the nose and throat which attends malignant scarlet fever. In chronic inflammation and ulceration of the throat. It is especially homœopathic to quinsy sore-throat. In syphilitic ulceration of the tonsils, uvula, root of the tongue and inner side of the lips, when the parts look as if lard or starch had been infiltrated into and beneath the mucous membrane. Aphthæ of the mouth and fauces. Acute and chronic pharyngitis and œsophagitis, even of the membranous or croupous kind. Chronic inflammation of the palate, uvula, tonsils, mouth and fauces, attended with burning, stinging, soreness, and more or less follicular ulceration. Chronic inflammation of the mucous membrane of the fauces, with soreness, redness and dryness of the throat, aggravated by every change of the weather. In obstinate ulceration and phagadæna of the throat, more or less diluted acid must be applied locally. (11.)

Stomach.—Dull pains in the stomach, becoming very intense upon the slightest pressure; repeated nausea, and vomiting from time to time; vomiting of a dark and glairy liquid, and finally of a liquid more clear and of a citron color; burning pains in the stomach; violent pains at the epigastrium; vomiting of a mucous and yellow fluid. (2.)

Great thirst continually ; sour eructations ; nausea ; heat and burning in the stomach. (1.) Pain in the stomach ; retching and vomiting ; vomiting of black liquid blood, also of portions of detached mucous membrane ; distention of the epigastric and hypogastric regions which are painful to the touch. (6.)

PATHOLOGY.—Stomach very much distended, and covered with dark spots ; stomach distended with gas, and containing a yellowish, flocculent, non-fetid liquid ; dark spots on different portions of the mucous membrane of the stomach ; thickening and redness of the walls of the stomach. (2.) Perforation near the smaller curvature of the stomach ; portions of the mucous membrane detached from the muscular coat ; dark spots on different portions of the mucous membrane ; enormous distention of the stomach ; stomach containing a large quantity of thick, offensive, chocolate-colored fluid ; mucous coat of the pyloric orifice very much thickened ; ulcers near the pyloric orifice—some of them in process of healing ; mucous membrane of the pylorus bright red, but at the most dependent point, greyish brown, and disorganized ; on cutting through the thickened and ulcerated mucous membrane, a grating sensation was felt, like that described by Andral when cutting through cancer of the stomach. (6.)

Clinical Remarks.—Cardialgia, and heartburn, and pyrosis, which have resisted the use of alkalies are often curable by Nitric-acid.

It is one of the most homœopathic remedies for chronic ulceration of the stomach, even against the perforating ulcer. Unfortunately the symptoms of perforating ulcer are exceedingly obscure, owing possibly to the most frequent seat of the ulcer being in the upper portion of the anterior wall of the stomach, so that food, drinks and irritating substances rarely touch it. The symptoms are those of chronic gastritis or mere dyspepsia, although many of these cases are remarkable for the slight inconvenience experienced previous to the completion of perforation. Young women with more or less anæmia and disordered menstruation are most subject to it, although it sometimes attacks males. The attacks of perforation are often sudden ; a young woman apparently in good health may be attacked while putting up her hair ; but many cases occur soon after a hearty meal ; when perforation actually occurs, the symptoms are those of acute peritonitis, viz., incessant vomiting, hiccough, tension, tenderness and swelling of the belly, quick, thrilling pulse, and clammy perspirations. After perforation has taken place, the pain and distress never cease ; the severe pain at the epigastrium or right hypochondrium and the extreme anxiety and distress of the patient's countenance are more pathognomonic than the vomiting, or state of the pulse. The attacks are often so sudden, that suspicion of poisoning is often excited. (11.)

If perforation has been diagnosed, not a particle of food or drink should be swallowed—beef tea injections—suppositories of Opium and Arsenic may be used—bits of ice may be held in the mouth, but the fluid should be spit out again. (11.)

Nitric-acid is also homœopathic to hæmatemesis. (11.)

It is the only known, absolutely homœopathic remedy for hard cancer of the stomach, especially of the pylorus. (11.)

Abdomen.—Abdomen distended and painful to the touch; tearing pains in the abdomen; violent colic; severe pains throughout the entire abdomen; pains increased from the lightest pressure upon the abdomen. (2.) Frequent pinching in the abdomen; cutting pain in the abdomen, in the morning in bed; excessive flatulence; rumbling in the abdomen; suppurating swelling of the inguinal glands. (1.) Muscles of the abdomen contracted; distention of the hypochondriac region, which is tender to the touch. (6.)

PATHOLOGY.—Increased thickness and redness of the upper portion of the jejunum; dilatation of the calibre of the duodenum; inflammation and thickening of the peritoneum; adhesion of the peritoneum to different parts of the walls of the abdomen; duodenum and jejunum covered with a thick layer of a yellow serous substance, which can be readily detached; slight injection of the vessels of the peritoneum. (2.) Peritoneum healthy; mucous membrane of the duodenum destroyed; small intestines somewhat contracted and atrophied. (6.)

Clinical Remarks.—It is homœopathic to true peritonitis; to ulceration of the bowels with diarrhœa, and hæmorrhage occurring during typhus fever, dysentery, chronic diarrhœa, or phthisis. In habitual constipation Dr. Graves has occasionally derived remarkable benefit from it. In cholera Nitric-acid, largely diluted, has been used successfully by Sir James McGregor and Dr. Hope; when largely diluted and sweetened they say that it may be used as an ordinary drink in this disease. Injections of dilute Nitric-acid are very useful in chronic diarrhœa and hæmorrhage from ulceration of the bowels.—In puerperal intestinal irritation where diarrhœa is a prominent symptom, Nitric-acid with or without opium is often very useful. (11.)

Liver and Spleen.—It is supposed to exert more direct action upon the liver than the other acids, and to affect the stomach more quickly and severely. In *chronic hepatitis*, the symptoms will frequently be ameliorated and subdued by dilute Nitric-acid; if persevered in, it will cause slight soreness of the mouth; sponging the body and the surface of the liver particularly, with the dilute acid is also often very useful.—In chronic affections of the spleen Amnesley recommends the internal and external use of this acid. (10.)

Rectum and Stool.—Very frequent and urgent desire for stool, but without the ability to accomplish any thing; obstinate constipation, with constant desire to go to stool; (2.) Long pressing when going to stool; itching and pressure in the rectum. (1.) Painful and bloody stools, with tenesmus and prolapsus of the rectum; prolapsus of the rectum. (5.) Discharge of a large quantity of offensive, black blood; constipation. (6.) Dr. Walter's drank accidentally and quite heartily of dilute Nitric-acid; some time after vomiting freely he had pain, griping, and flatus, followed by tenesmus and bloody stools, with headache and fever; the dysentery lasted two days.

Clinical Remarks.—Dr. Chapman thinks that colic preceding the

stool, itching of the rectum and hepatic disorder are indications for its use in diarrhoea and dysentery. Dr. Perry has cured four cases of prolapsus-ani, with the 30th dilution of Nitric-acid in alternation with the 30th dilution of Ignatia. We have cured one case of *prolapsus-ani* with the acid (30th dilution), given every night for six weeks. We have also cured one case of *fistula-in-ano*, (complete) of two years' standing with the acid and Ignatia at the 30th dilution, giving them on alternate weeks, once a day. The strong acid may be applied to that soft, red, strawberry-like elevation which Houston of Dublin calls a vascular tumor of the rectum. (10.)

Urinary Organs.—Frequent and ineffectual attempts to urinate; after several attempts to urinate, he passes a few drops. (2.) Fetid urine, nightly desire to urinate. (1.)

Clinical Remarks.—It seems to have of all the acids the most decided and specific action upon the kidneys. From a chemical position Nitric-acid has been advised in albuminuria, from the known fact that Acidum-nitricum is a most delicate test for albumen.—After taking Acidum-nitricum pain in the lumbar region and kidneys is observed, and from there to the bladder, attended with great urging to pass urine, followed by diminution, even suppression of the secretion of urine for some days, and enuresis. The urine burns when passing the urethra, is very turbid, has a bad smell and is very dark, even brown in color, depositing fibrous nubecula, and much brown-red, greasy sediment. The mucous membrane of the urethra is likewise affected as in the first stage of blenorrhœa; pains in the orifice of the urethra commence very soon after the use of the remedy, as in case of stone in the bladder. It is not known whether albumen in the urine is produced by taking Acidum-nitricum. (Reil.) (10.)

In calculous diseases, more especially in the alkaline and phosphatic diathesis, Nitric-acid may be employed with advantage—Brodie speaks highly of its value.—In extreme cases large doses must be given; the effect of these large doses in correcting the alkaline quality of the urine is very remarkable—he also employed it as a direct solvent of stone, by injecting the dilute acid into the bladder. In chronic inflammation of the bladder Brodie also used these injections. (11.)

In diabetes Dr. Bardsley found it generally productive of benefit, mitigating the thirst and heat, and diminishing the secretion of urine.

Genital Organs.—*Clinical Remarks.*—Frank, in Vol. 1. No. 4 of his magazine reports six cases of rheumatism and gout, brought on by colds following syphilis, either cured, or greatly relieved by baths slightly impregnated with Nitric-acid. The same gentleman reports several cases of suppurating syphilitic bubos, and of secondary syphilitic ulcers upon the genital organs, cured by the internal use of Nitric-acid baths; many of these cases having previously resisted the use of Calomel, &c. (10.)

Mr. Ely S. W. (March 9.) Irritation of that portion of the urethra traversing the glans. Twenty years ago Mr. W. caught a severe

gonorrhœa, which was cured in a few weeks. A month after the cure of the gonorrhœa, he felt the first symptoms of the irritation, which manifested themselves by a distracting titillation in the part, which was soon followed by burning on micturition. No signs of stricture existing, and his assurance that several physicians had already passed bougies into the bladder, without much difficulty, led us to suppose his case one of simple irritation of the urethra which could easily be removed by homœopathic remedies. March 9. Canthar. 1 $\frac{1}{10}$. March 12. somewhat relieved. Canthar. again. March 19. No improvement. Stitching in the glans-penis in addition. Intense feeling of formation in the urethra. Cannab. 1 $\frac{1}{10}$. March 23. No change of itching, pain in the glans at intervals. Acidum-nitricum 1 $\frac{1}{2}$. Now decided improvement commenced and continued by the uninterrupted administration of the remedy until the last week of May, at which time the patient was discharged and having had no symptoms of disease from that time to this, may be considered as permanently cured, in spite of the great length of duration of his affection. (Füllgraff.)

Female Sexual Organs.—Leucorrhœa of greenish or pinkish mucus; fetid leucorrhœa; profuse menstruation. (1.)

Clinical Remarks.—At the first dilution, Nitric-acid is one of our most valuable remedies against obstinate, leucorrhœa, with acrid, greenish, or yellowish, and fetid discharges. We have found it especially serviceable in cases of universal mucous derangement, catarrh, dyspepsia, chronic diarrhœa and leucorrhœa. (10.)

Larynx and Trachea.—Voice hoarse and weak. (2.) Hoarseness; dry, barking cough, worse in the evening; yellow expectoration; cough with bloody expectoration. (1.) Difficult respiration. (6.)

Clinical Remarks.—It is one of the most useful remedies against chronic laryngitis, ulceration of the larynx, and chronic aphonia.

Chest.—Rapid, difficult, and painful respirations. (2.) Shortness of breath; panting respiration; palpitation of the heart when walking; stitches in the right side of the chest and scapula; cramp-like drawing in the chest; congestion of blood to the upper part of the chest. (1.)

PATHOLOGY.—Blood coagulated in the left ventricle of the heart, and in the aorta. (6.)

Clinical Remarks.—It has been used very successfully against chronic asthma, and hooping cough. (See Vol. 1. p. 131 of this Journal.) In pneumonia in old or very feeble persons, when the cough is either dry, or attended with copious green and bloody expectoration, violent stitches generally on the left side, excessive difficulty of breathing, soft, intermitting pulse and profuse perspiration. (11.)

Superior Extremities.—Coldness of the extremities; feeling of coldness in the hands and arms. (2.) Pressure on the right shoulder; drawing pain in both arms; very cold hands; sweaty hands; the hands go to sleep; swelling of the fingers. (1)

Inferior Extremities.—(2.) Coldness of the extremities; feet and legs feel quite cold; legs feel weak and heavy. (2.) Coldness and feeling of coldness in the right leg; heaviness of the lower limbs; copious sweat of the soles of the feet; drawing in the muscles of the thigh; bends of the knees stiff and swollen; cramp in the calf of the leg; drawing and tearing pains in the feet; chilblains on the big toes; redness, inflammation and swelling of the big toes. (1.)

Sleep.—Drowsiness in the day-time; frequent waking in the night; unrefreshing, restless sleep; nose bleed at night; anxious sleep, with moaning; anxious dreams; after waking in the morning,—trembling of the whole body. (1.)

Fever.—Surface of the body cold and covered with sweat; coldness more marked in the extremities; pulse small and frequent; cold sweat over the entire body, with an almost imperceptible pulse; slight chills; accelerated and difficult respiration; great agitation and anxiety; pulse small, frequent and irregular; delirium; continual anxiety, general feeling of chilliness, small and almost imperceptible pulse. (2.) Chilliness especially in the evening; cold skin over the whole body; frequent flushes of heat in the day-time; night sweats; fetid sweat during the night. (1.) Pulse small and frequent. (6.)

Clinical Remarks.—We have often used the 2d dilution of Nitric-acid, in malignant scarlatina, with excellent results. We have seen it especially serviceable for the following symptoms: greyish ulcers in the throat; exceedingly fetid and offensive odor from the mouth and nostrils; acrid glutinous, fetid discharge from the nostrils; stupor; dry, dark, red tongue; nightly delirium; redness of the conjunctiva; pulse small and quick, or slow and intermittent; glandular swellings. The same dilution has likewise proved serviceable in our hands, for the cure of the following symptoms occurring in typhoid fevers: Coldness and moisture of the extremities; frequent, small, and irregular pulse; rapid, difficult, and irregular respiration; dry and dark tongue; lips dry and black; moaning; delirium; lethargic sleep; tenderness of the abdomen on pressure; frequent and sudden desire for stools; constant, but ineffectual desire to pass urine.

It has been used very successfully in fever and ague. (10.)

Skin.—Skin cold and covered with a cold perspiration; skin pale, and bloodless. (2.) Itching of the skin. (1.)

Clinical Remarks.—Dr. Edward Cooke used the acid successfully in several cases of inveterate *elephantiasis*. We have employed the 1st dilution with marked benefit in numerous cases of eczema occurring in persons of gouty diathesis. (10.)

General Symptoms.—General depression of the vital force; great sense of lassitude, and prostration; intellectual faculties unimpaired; great anxiety and agitation; coldness of the whole body, but most notable in the extremities; burning pains in the mouth, throat, œsophagus and stomach; abdomen distended and painful, especially

when pressed upon; constant vomiting of darkish, glairy, yellowish and other fluid. (2.) Frequent drawing pains in every part of the body; tearing in the upper and lower limbs; proneness to take cold; heaviness; emaciation; excessive thinness; great lassitude and debility. (1.)

Clinical Remarks.—Old school physicians say that the dilute acid is tonic, alterative, and refrigerant.

Characteristic Symptoms.—The symptoms increase toward evening; slight pains produce violent constitutional effects. (1.)

From the property which Nitric-acid possesses of *coagulating the blood* when introduced into the circulation, we infer that it must prove a valuable remedy in *cholera asphixia*, and in certain stages of yellow fever. (10.)

ACIDUM OXALICUM.

OXALIC ACID.

TOXICOLOGICAL EFFECTS.

According to Christison when the *concentrated* acid is injected into the stomach of a dog or cat it causes exquisite pain, expressed by cries and struggling; in a few minutes this is succeeded by violent efforts to vomit; then by sudden dulness, languor and great debility; and death soon takes place without a struggle.

PATHOLOGICAL APPEARANCES.—The stomach is found to contain black extravasated blood, exactly like blood acted on by Oxalic-acid out of the body; the inner coat of the stomach is of a cherry red color, with streaks of black granular warty extravasation, and very brittle; the subjacent stratum is *gelatinized*. This gelatinization is somewhat peculiar to Oxalic-acid, as this agent has no chemical action on any of the common animal principles, except *gelatin*, which it dissolves rapidly; and this solution is of a peculiar kind not being accompanied with any decomposition either of the acid or gelatin.

The *dilute* acid, viz., 1 part to 20 of water, like the mineral acids under the same circumstances, ceases to corrode; nay it hardly even irritates; but unlike them it continues to be a deadly poison, for it causes death by acting indirectly on the brain, spine and heart.

The symptoms vary with the dose: when the quantity is large, the most prominent symptoms are those of palsy of the heart, and immediately after death the heart is found to have lost its contractility and to contain arterial blood in its *left* cavities.

When the dose is *less*, there are several fits of tetanus, which affect the respiratory muscles of the chest in particular, causing spasmodic fixing of the chest and consequent suffocation.

When the dose is *still less*, the spasms are slight or altogether wanting, and death occurs under symptoms of pure narcotism like those caused by opium: the animal appears to sleep away.

It is the most rapid and unerring of all the common poisons : death may take place in from ten minutes to one or a few hours ; several cases have lasted about thirteen hours, the patient then dying of exhausting fever, with dyspepsia and hiccough.

When the dose is large and concentrated, the first symptoms have been immediate burning pain in the stomach and generally also in the throat. When it is much diluted, pain may not set in for six or more hours.

In general, violent vomiting soon follows the accession of pain, and continues until death ; when the acid is much diluted, vomiting, is not so common ; the vomited matter is sometimes bloody. The tongue and mouth occasionally become inflamed if the patient lives long enough ; the tongue then becomes red, swollen, tense and tender. Death commonly takes place so soon that the bowels are seldom much affected, but if the patient lives several hours they are much irritated, with severe pain in the bowels, frequent inclination to go to stool, or constant involuntary discharge of fluid fæces, occasionally mixed with blood.

The signs of depressed circulation are always very striking ; in general the pulse fails altogether ; it is always very feeble, and the skin cold and clammy ; violent palpitation from irritation has been noticed, however, in one case.

In the slower cases various nervous symptoms have been observed, such as pain and great lassitude and weakness of the limbs, followed by numbness and weakness in the limbs and back, so that the patient could hardly walk.

In another case the first thing complained of was : acute pain the back, gradually extending down the thighs, occasioning ere long great torture, and persisting until death. In a third case there was headache, extreme feebleness of the pulse, and a sense of numbness, and tingling, or pricking in the back and thighs. In a fourth case : violent irritation of the bowels soon followed by a feeling as if the hands were dead, loss of consciousness for eight hours, then lividity, coldness and almost complete loss of the power of motion in the legs. In a fifth case, there was first violent vomiting, then severe pain in the stomach, and finally clammy perspiration and convulsions. In one case an eruption or mottled appearance of the skin in circular patches, not unlike the roundish red marks, on the arms of stout children, but of a deeper tint. In another case, the first appearance of the symptoms in ten minutes, was in the shape of vomiting of fluid of a dark bloody color ; on the ninth day an eruption appeared over the body, similar to the maculæ of typhus. In one case, the patient lost her voice for eight days.

CASE.—An officer took half an ounce of Oxalic-acid by mistake for Cheltenham salts, and at once became aware of his error ; but twenty minutes elapsed before he took Tartar-emetic, four grains.

He experienced immediately, great irritation of the throat and stomach, followed by a little vomiting ; great pain in the throat and

œsophagus. Magnesia in full doses relieved instantly the burning pain in the stomach, and was vomited off in a few minutes in a mass like coagulated milk. Two ounces of magnesia were taken and aided by emollient clysters, followed by several natural stools. The tongue became swollen, and thickly coated, as if it had been boiled; respiration oppressed; he complained of general rigidity of the body; a sticky perspiration broke out over the whole surface; the pulse at the wrist and temples was scarcely perceptible; extremities cold; nails brown; vomiting of blood; general rigidity; progressive debility and threatening of speedy dissolution. A profuse venesection from the arm, was followed by wine, opium, diluents, hot foot baths, fomentations to the epigastrium, and rubbing of the limbs, and in three hours the patient seemed out of immediate danger.

But in half an hour more chills with rigidity of the body sat in, followed by reaction, so that the pulse became hard and 96, followed by fever and profuse diaphoresis. Then the pulse rose to 120 and became weaker; the pain in the stomach was aggravated, but no more vomiting ensued; itching about the fingers followed, attended with unusual acuteness of the mind. Sago, with chalk powder, and clysters were now given. The perspiration lasted eight hours and then ceased; pulse 100 and weak; skin cold; neither pain nor tension of the abdomen; general quietude; tongue natural at the edges, rest coated. Beef tea, gelatine, milk and castor oil were given; in two hours more patient was quiet and slept half the night: towards morning he vomited and purged freely and fainted; stools were dark; violent eructations, cramps, and excessive hiccough: pulse 100 and weak; coldness of right arm, and chilliness of the feet. These symptoms persisted with great violence, and pain in the stomach again set in; opium was again given, followed by relief for three hours, when pain again commenced; an enema was followed by a scanty, blue colored passage; the cramps became more violent and attended with eructations and hiccough; the pulse was not quite so weak; the tongue became clean and moist at the edges only; inclination to stupor, alternating with restlessness. Alkalies, opium, clysters and fomentations were used from time to time.

He slept well on the second night; face swollen; pulse 90; no vomiting; quiet; *hoarseness*; during the night he had several small passages and an involuntary discharge of urine; tongue became coated with a white crust; frequent hiccough, and painful hawking; several doses of Castor-oil and one ounce of Sulph.-Magnesia were followed by increased pain in the œsophagus, more hiccough, vomiting and great anxiety; still two more one-and-a-half-ounce doses of Castor-oil were given and a stimulating injection, followed by stools.

For three days more the patient seemed to improve, then relapsed; the hiccough became more troublesome; the throat and tongue dry, and covered with spots; tongue reddish and brown; emaciation; weakness and anxiety; sleep more and more disturbed; then delirium; a *wart-*

like itching eruption broke out, followed by a general *redness* over the body; death, on the 11th day.

Post-mortem.—Eruption entirely gone; body emaciated; inflammation of the stomach and of a small portion of the bowels; a small quantity of dark fluid in the stomach; the villous coat almost entirely destroyed in the stomach and œsophagus; in a few places where it seemed sound it was soft and easily brushed off with the finger or a sponge; muscular coat of stomach and œsophagus much thickened, injected, and of a dark gangrenous appearance; the circular and longitudinal fibres were very distinct and easily separated; the cardiac portion was more inflamed than the pyloric. The small bowels were similarly, but less diseased.

Numerous fatal cases of poisoning have occurred from the resemblance of its crystals to those of Epsom-salts; but they may readily be distinguished by their crackling noise when dissolving in water; by the intensely acid taste and reaction, as compared with the nauseously bitter taste of Epsom-salts. The crystals of Oxalic-acid also resemble those of Sulphate of Zinc.

Oxalic-acid is now obtained in the largest quantities from the action of Nitric-acid on several substances of the nature of starch and sugar, including these substances themselves. Hence it has been called the *Acid of Sugar*. It is very probably that it is often developed in the stomach of young children, and in dyspeptic subjects who use much sugar.

It is also a final product of oxidation of the most animal and vegetable bodies, and hence may be formed in various parts of the body. When the respiratory process is in any way disturbed, we most frequently observe a copious excretion Oxalate of Lime; it is most common in fully developed pulmonary emphysema, or when the pulmonary tissue has lost much of its elasticity after repeated catarrhs. It is not common in inflammatory and tuberculous affections; but is frequent in the convalescence from typhus. (11.)

Principal Sphere of Action.—The primary action of this acid is upon the spinal marrow and brain, and the secondary effect upon the heart and lungs. The vertex and forehead are the portions of the brain most decidedly impressed. It has a marked action upon both the mucous membrane of the respiratory apparatus, and the substance of the lungs. In the abdomen, the most powerful impression is produced in the region of the navel, in the form of colic and difficult emission of flatulency.

It appears to exercise a specific influence over the urinary and genital organs, but we are inclined to believe that many of the symptoms in this region, are due to an irritation of some portion of the cerebellum rather than to any *direct* action upon these organs. When taken internally, says Waring, it is absorbed into the system, and has been detected in the blood, in the substance of the heart, and in the

urine it is found in combination with an alkali. Dr. Prout says that it passes through the kidneys unchanged. (10.)

Antidotes.—To large doses, Dr. Christison prefers Magnesia. This gentleman also advises Ammonia, Ether, and Chalk, as antidotes.

Mr. Thompson recommends Chalk as an antidote, and has given it successfully in several instances after serious symptoms of poisoning had manifested themselves.

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PHENOMENA.

Mind and Disposition.—Disinclination to engage in any mental occupation; inability to accomplish any intellectual labor. (29.) Unusual exhilaration; increased power of concentrating the mind (secondary effect); disinclination to converse; cheerfulness, exhilaration, and unusual activity of thought and action; diminished power of centring the mind (primary effect). (5.)

Clinical Remarks.—Patients with the Oxalic-acid diathesis are apt to have general debility, nervous irritability, dyspepsia, tendency to boils, and scaly or impetiginous eruptions; or are apt to be irritable, extremely sensitive, dyspeptic, feeble, emaciated, and full of hypochondriacal notions and gloomy apprehensions. (11.)

Head.—Dizziness, confusion, compressing pain in the forehead; pains in the forehead and eyes as if a catarrh would set in; hammering headache in the temples. (29.) Dull pains in the forehead; pain in the vertex; giddiness the whole day; headache; pains in the occiput, with erections; constant dull pain the forehead and vertex; fullness and heaviness in the forehead. (5.)

PATHOLOGY.—Arachnoid and pia-mater filled with a considerable quantity of a clear liquid (in men). (29.) The medullary substance of the brain more white than natural, and the choroid plexus than is usual in cerebral congestions. (2.)

Clinical Remarks.—Dr. Neidhard reports several prompt cures of dull pains in the forehead, with the 2d trituration of the acid.

Eyes.—Pupils dilated, even in a bright light; congestion of conjunctival vessels; eye-sight weak; dryness of the eyes; eyes fixed (in animals) pupil inactive. (29.)

Clinical Remarks.—It will probably prove as useful in scrofulous ophthalmia as Nitric, and some other acids. (11.)

Face.—Distortion of features; face cold, and covered with a cold perspiration; pale face; lips and face pale; death-like expression.

(29.) An internal sensation of heat, especially in the face; pain in the temple, extending as far as the lower jaw. (5.) Face inanimate and melancholy; eyes closed. (2.)

Mouth and Throat.—Acid taste; scraping in the throat, causing cough; sensation as if the uvula were swollen; difficulty of deglutition, with a sensation of scraping in the throat; tonsils and uvula redder than natural and covered with tenacious mucous; pains in the throat as if inflamed; burning pain in the mouth and throat; tongue and throat red and swollen; dysphagia with burning in the throat and œsophagus; tongue swollen; tongue red, swollen, stiff and sensitive; tongue clean and moist; tongue brown and dry. (29.) Tongue swollen, covered with a thick white coat; feeling of burning in the mouth, œsophagus and stomach. (4.) Burning pains in the mouth and throat; tongue clean and humid. (2.)

PATHOLOGY.—Mucous membrane of the œsophagus easily detached; mucous membrane of larynx and trachea very livid; mucous membrane of œsophagus disorganized; muscular coat thickened and very red.

Clinical Remarks.—Oxalic-acid at the 3d trituration has been useful in chronic inflammation of the mucous membrane of the throat and tonsils, and in obstinate scorbutic disease of the gums and mouth. In a case of glossitis, after the acute symptoms had been partially subdued by Aconite, Belladonna and Mercurius, the cure was completed by the 3d trituration of the acid. (10.)

Stomach.—Appetite good at first, notwithstanding the increasing pain in the stomach; increased appetite gradual diminishing to complete anorexia; clean tongue; griping pain in precordial region; feeling of emptiness in the stomach, obliging him to eat; sickness at the stomach with inclination to vomit; sensation of burning in the stomach; pressure as of a weight on the stomach; gulping up of tasteless air; pain in the stomach; pain in the stomach obliging him to bend forward; sugar increased the pain; sickness at the stomach with frequent vomiting; pain and vomiting; vomiting of blood; eructation and hiccough; violent burning in the stomach; stomach very painful to the touch. (29.) Feeling of irritation in the stomach; vomiting of blood; burning sensation in the stomach. (4) Burning pain in the stomach; eructation and discharge of flatulence by the anus; eructation of tasteless wind after each meal; pyrosis every evening; pain in the stomach; stomach sensitive to the touch; unusual thirst. (5.)

PATHOLOGY.—Inner coat of the stomach pulpy, dark, or red; outer coat of the stomach inflamed; villous coat of the stomach soft, pale and brittle, but here and there injected with vessels; stomach contains a dark and bloody fluid. (5.) Superficial inflammation of the cardia, pylorus, duodenum, and part of the ileum; muscular coat of the small intestines thickened and very red; colon contracted without inflammation; mucous membrane of the throat and œsophagus appears as if scalded; intestines highly inflamed and distended with gas; spleen disorganized. (29.)

Clinical Remarks.—The 12th dilution has quite recently proved curative in a case of long-standing dyspepsia, with burning in the stomach, eructations tasting of food, after every meal, great distention of the stomach and bowels with wind; pressure at the pit of the stomach, and sour taste soon after eating. (10.) Dr. Nardo of Turin has employed this salt with uniform success for many years in inflammation of the mucous membrane of the stomach. He prescribes one grain three times daily in solution. In these doses this gentleman observed from its use powerful antiphlogistic properties, and direct sedative effects.

It is perhaps the most homœopathic remedy for gastromalacia, or gelatiniform softening of the stomach. Oxalic-acid has been discovered in the blood in a case of chronic hiccough and vomiting, and in several cases of gout. (11.)

Abdomen.—Painless rumbling in the abdomen; distention from flatulence; discharge of bad smelling flatulence; griping pain in abdomen and umbilical region; rumbling and cutting pain; violent cutting pain as if diarrhœa would set in; pain in the abdomen and intestines; abdomen painful to the touch. (29.) Pains around the navel like colic; sensation of soreness in the abdomen; pain in the left hypochondrium; flatulent colic; colic pain around the umbilicus and in the right iliac region, coming on in paroxysms; pain in the region of the navel, with painful pressing down towards the anus, and difficult discharge of flatulency; severe pain in the bowels and frequent inclination to stool. (5.)

PATHOLOGY.—Ileum much inflamed to within a few inches of the colon; inner membrane of the intestines pulpy, or dark or red; colon contracted throughout its entire extent, but without any appearance of inflammation. (2.) Oxalic-acid is often present in the mucus of the gall-bladders, especially in hypochondriacal subjects. Donn   thinks that after the use of sparkling wines the quantity of oxalic is increased in the urine; also from the use of beer containing much Carbonic-acid, and of the alkaline bi-carbonates and vegetable salts. Lehmann then supposes that the superfluous Carbonic-acid which has entered the blood, obstructs the absorption of oxygen and the perfect oxidation of certain substances in the blood, especially in pulmonary emphysema, pulmonary compression during pregnancy, &c. (11.)

Stool and Anns.—Sluggish stool; hard stool; f  ces enveloped in mucus; stool loose, and tenacious with tenesmus; discharge of mucus after stool; large discharge of soft stool with griping pain in the abdomen previous to it; yellowish, slimy, serous thin stool with tenesmus; burning in the rectum, also light serous discharges streaked with blood and tenesmus; watery discharges; tenesmus without stool; frequent stools; constant discharges of liquid f  ces, sometimes mixed with blood; blackish stool; constipation. (29.) Evacuation puffy and of a light brown color; severe pain in the bowels, and frequent inclination to stool; colic pains in the umbilical region,

followed by discharges of hard, dark brown fæces; flatulency in the right side of the abdomen after stool. (5.)

Urinary and Genital Organs.—Diminished inclination to pass water; pain in the regions of the kidneys; urine, acid; deposit of oxalate of lime in the urine. (29.) Frequent inclination to pass water, which is large in quantity, clear, of a straw color, and causing a burning sensation during the discharge; increase of the sexual desire, with voluptuous dreams for several nights in succession; pain and heaviness in the testicles, shooting along the spermatic chords, worse on the right side. *Mulberry calculus.* Deposit of Oxalate of Lime.

PATHOLOGY.—Bladder distended with urine; much urine in the kidneys. (29. 4.) Oxalic-acid is scarcely ever absent from the mucous membrane of the impregnated uterus, and in the urine of pregnant women, especially in nervous, dyspeptic and hypochondriacal females who suffer much with leucorrhœa and difficulty of breathing. Since the discovery that Uric-acid is decomposed by Peroxide of Lead into Urea, Allantoin, and Oxalic-acid, it has been pretty generally assumed that the Oxalic-acid of the urine is due to an oxidation of the Uric-acid; the Oxalic-acid in this case *not* being converted into Carbonic-acid, as usually occurs in the healthy organism. Lehmann thinks that it is unquestionable that the formation of Oxalic-acid may be in part thus explained. (11.)

Larynx, Thorax, Heart, Pulse.—Feeling of oppression in the lungs; breathing slow; Pulse hardly perceptible; pulse small and quick; trembling, intermittent pulse. (29.) Difficult breathing, pulse hardly perceptible; small quick pulse. (4.) Slight cough from tickling in the larynx and trachea, also sensation of soreness in the trachea; expectoration of thick, yellow mucus from the throat; sharp, shooting pain in the left lung and heart, extending down to the epigastrium; stitches in the left breast, worse when walking.

PATHOLOGY.—Bright red spots in the lungs, without any trace of effusion; a few minutes after death, the heart ceases pulsating, and loses its power of contraction; blood in the right cavities of the heart, black; and in the left cavities, red. (2.)

In Animals.—Cavities of the heart distended by coagulated blood; contractility of the heart lost immediately after death; Lungs as red as scarlet, with black spots here and there; blood in the cavities of the heart *reddens* blue lithmus paper. (Acid.oxal. injected into crural vein.) Liquid in thoracic duct does *not* redden blue lithmus paper. (Injection Pleura.) (29.)

Clinical Remarks.—Dr. Dubs of Philadelphia reports a case of chronic sore throat cured by the 2d trituration of the acid.

In the "London Lancet" of March, 1855, page 232, Dr. John Hastings records three cases of tubercular phthisis with cavities in the lungs, very materially benefited by the use of half-grain doses of Oxalic-acid three times a day. Under the use of this remedy the expectoration gradually diminished, flesh and strength slowly returned,

until after the expiration of a few months the cavities in the lungs became dry, and the patients restored to a comfortable state of health.

In our own practice we have prescribed the acid in numerous cases of chronic bronchitis, and tubercular phthisis, and generally with favorable results. Where cavities have existed in the lung, we have several times observed the expectoration to diminish, the respiration to improve, the strength and flesh to return, and the cavity to dry up. But in all of these examples, there has remained great shortness of breath upon the slightest exertion, and other symptoms which indicated that the malady had only been temporarily arrested. (10.)

We have usually prescribed the acid at the 12th dilution. (10.) Dr. Nardo, of Turin, commends the acid very highly in inflammation of the mucous membrane of the lungs. Oxalate of Lime has been discovered in expectorated matter; it is common in emphysema and chronic catarrhs; also in convalescence from typhus fever; it is rare in inflammation in the lungs and tubercles. (11.)

Back.—Pain in the back; feeling as if the spinal column could not bear the weight of the body; acute pain in the back extending down to the thighs; sensation of stiffness and prickling in the back. (29.) Acute pain in the back; numbness and weakness in the back and limbs; weakness in the loins and hips, extending down to the lower limbs; sense of numbness, tingling and prickling in the sacrum, back and thighs. (5.)

PATHOLOGY.—Although the primary specific action of this acid is upon the spinal marrow and brain, we are not aware that any morbid changes of the spinal marrow have been recorded, in consequence of poisoning with it. That morbid changes are produced by poisonous doses of this active substance cannot be doubted, and we trust that the microscope will in future reveal to us their character. At present we must rest satisfied with pathogenetic phenomena and clinical observations. (10.) It seems to exert a most specific action upon the small of the back; upon the lumbar and crural nerves. (11.)

Upper Extremities.—Coldness of the upper extremities; feeling of lameness in the arms; fingers rigid. (29.)

Nails of the fingers brown. (4.) Sharp, shooting pain in the right shoulder joint; the right wrist painful, as if it were dislocated or strained; sensation as if the hands were dead. (5.)

Clinical Remarks.—Oxalic-acid is distinguished by its powerful affinity for *Lime*, separating it even from Sulphuric-acid; in consequence of this property its use has been suggested in exostosis, hypertrophy of the bones, and various morbid growths of the bones. (11.)

Lower Extremities.—Coldness of the feet and legs; difficulty in going up-stairs; pain extending from the thighs downwards; (29.) extremities cold. (4.) Violent contracting pain in the external tendon of the knee; lividity, coldness, and almost complete loss of the power of motion in the legs, which symptoms were not entirely removed for fifteen days. (5.) Weakness and numbness of the limbs, extending down the thighs, and, towards the end, convulsions. (3.)

PATHOLOGY.—Among the first symptoms observed in animals which have been poisoned with the acid, is a rigidity, and paralytic condition of the hind legs. These symptoms are due to the impression made by the drug upon the spinal marrow, since no morbid appearances are observed in the legs of the animal after death. Phenomena of this description demonstrate the importance of looking *beyond* mere *visible* symptoms, in order to obtain a correct idea of disease, as a painless disorder of one structure may give rise to serious symptoms in distant parts. In such instances, we must appeal to pathology to enlighten us, in order that we may strike at the *cause* as well as the *effect*. (10.)

Sleep.—Restless; sleepiness; prolonged sleep. (29.) Disturbed sleep; sleep disturbed by frightful dreams; unusual inclination to sleep; frequent waking from sleep. (5.)

Fever.—Delirium; restlessness; headache; great thirst; great chilliness; shaking chills. (4.) Internal sense of heat, particularly in the face; flushes of heat and perspiration all over the body; hands, feet and face cold, and covered with a cold perspiration; pulse increased in frequency; pulse small and frequent, with deadly coldness, clammy sweats, and sometimes lividity of the nails and fingers. (5.) Pulse small and frequent, or moderately full and only thirty-two in the minute. (2.)

Clinical Remarks.—On several occasions, when administering this medicine to consumptive subjects, we have observed a marked diminution of the hectic symptoms. Under its influence we have seen the pulse become more slow and full, the night sweats and expectoration diminish, the diarrhœa cease, and the strength and flesh gradually improve. In a single case of hip-disease, accompanied by emaciation, much pain in the hip, disturbed sleep, feeble and rapid pulse, diarrhœa and night sweats, we have prescribed the 12th dilution of the acid with unequivocal benefit. (10.)

It has been used in some forms of fever; it is apparently homœopathic to some of the stages of petechial typhus, especially when hæmorrhage from the bowels occurs, although Nitric and Muriatic-acid may have to be used in addition. (11.)

Skin.—Skin cold and pale, and covered by a sticky sweat; Skin wrinkled on raising it and remaining so, without elasticity; eruption over the whole surface; red, round spots on the skin. (29.) Smarting soreness around the neck, as if chafed by a collar; itching on the neck; circular patches of an eruption of a mottled color upon the surface; violent itching on the right side of the neck and hairy scalp, and on the left side of the trunk. (5.)

Clinical Remarks.—We have employed the acid at the 6th, 12th and 30th dilutions in *crustea lactea* with violent itching, and in two cases of eczema also, with intolerable itching and burning, occurring in persons of a gouty diathesis, but without any benefit. These results are unfavorable, but none the less worthy of notice. (10.)

It is homœopathic to eruptions of a mottled appearance occurring in circular patches; to the maculæ of typhus; to wart-like eruptions, and general redness of the body, such as occurs in many nervous women with uterine and ovarian disorder. (11.)

General Symptoms.—Burning pains in the mouth, œsophagus, neck, chest, stomach, abdomen, and anus; feeling of coldness and prickling in the back and thighs; exhaustion; general malaise; stupefaction; fainting; twitching of the limbs; general convulsions; increased by friction on the back; opisthotonos (in animals); paralysis of the lower extremities (in animals.) (29.)

Complaining of coldness and numbness of the body, which is covered by a sticky cold sweat. General trembling of the body; convulsions; sinking of strength. (4.)

Christison asserts that "*the primary action of the poison is on the spinal marrow and brain, and the heart and lungs are affected secondarily, through the injury done to the nervous system.*"

The pains are increased and excited by movement; the acid affects the joints: ankles, knees, hips, wrists, and shoulders; nervous symptoms; convulsions; general numbness and tremor of the limbs. (10.)

ACIDUM PHOSPHORICUM.

PHOSPHORIC ACID.

Phosphoric-acid is an important constituent of the brain and nervous system. Nearly fifty per-cent. of the *ash* of an ox's brain proved to be Phosphoric-acid, and more than forty per-cent. was obtained from the ash of the brain of a hospital patient. It is evident from this extraordinary quantity of Phosphoric-acid in nervous matter, that it must play an important part in the diseases of the nervous system.

It also has an important relation to the urine and urinary diseases. It is supposed that a person of 150 lbs. weight, of regular habits, discharges about 4 grammes of Phosphoric-acid in twenty-four hours. Taking an excess of common salt diminishes the amount of Phosphoric-acid in the urine, whilst the use of Potash increases it. The quantity of Phosphoric-acid in the urine is diminished in rheumatism, consumption, fever and ague and cancer of the liver, viz., it may fall as low as 1 gramme and rarely exceeds $2\frac{1}{2}$ grammes—while in apoplexy, epilepsy and mollities ossium it is poured out in excess, varying over $5\frac{1}{2}$ grammes in apoplexy, from 3 to 8 grammes in epilepsy, and from 6 to 8 grammes in mollities ossium.

From its peculiar base it is to be supposed that Phosphoric-acid possesses very peculiar properties, vastly different from those of the ordinary mineral acids. Ordinary acids are described as refrigerant, tonic and anti-alkaline, but Phosphoric-acid besides all these properties

exerts a peculiar action upon the brain and nervous system, upon the urinary and genital organs, and upon the bones.

It has been found useful in pains, inflammation and suppuration of the bones; against caries of the bones and teeth, rhachitis, softening and bending of the bones; against diseases of the bones in which a fluid and offensive pus is discharged, rather than against carious ulcers which have gone on to true necrosis. Lentin cured a case of caries of the frontal bone by the internal and external use of this acid; also a case of caries of the first false rib. Wolff cured a case of whitlow with caries, where the external application of Phosphoric-acid seemed to hasten in a remarkable manner the reproduction of the ulcerated phalanx.

Like all the acids it is said to be tonic and astringent, checking all excessive liqueficient and colliquative processes. It has been used successfully against colliquative perspirations, excessive pollutions, leucorrhœa, profuse and exceedingly offensive expectoration, obstinate diarrhœa, passive hæmorrhagies.

It has been used successfully against many varieties of hæmorrhage; viz., bleeding from the womb, expectoration of blood, bleeding from the mouth, nose and rectum; especially in actually scorbutic hæmorrhages, in which there is an entire absence of coagulability of the blood, coupled with great atony of the bleeding organ; also where there is excretion of blood in consequence of decay or decomposition of the affected parts.

General sphere of action.—In large doses it acts as a powerful stimulant to the nervous and vascular systems; it is absorbed into the system, and has been detected in the blood; it also communicates a peculiar odor to the breath. In very large doses it is an irritant poison; convulsions and insensibility preceding death. (Waring.)

Hecker asserts that it exercises a specific influence over the nervous system, in virtue of which it possesses the power of allaying pain and spasms.

Lentin ascribes to it a specific action upon secreting surfaces and the bones, thus rendering it a valuable remedy in certain affections of these parts.

Others regard it as aphrodisiac, and have employed it successfully as a tonic and stimulant in debilitated conditions of the sexual organs.

When injected into the veins, it coagulates the blood.

This acid is tolerated by the system better than either sulphuric, nitric, or muriatic-acids; being less liable to derange the stomach, or to give rise to other constitutional disturbances.

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Hahnemann. *Mat. Med. Pur.* (1.) Orfila. *Traité de Tox.* (2.)
Pereira. *El. Mat. Med. and Ther.* (3.) Franks' *Mag.* (4.) Marcy.
(10.) Peters. (11.)

PHENOMENA.

Mind and Disposition.—Sadness. Constantly brooding over his illness. Not satisfied with himself. Indifference. Not disposed to talk. Sad and low-spirited when walking in the open air. (1.)

Clinical Remarks.—Phosphoric-acid has now and then been useful in cases of despondency and irritability, arising from long-continued involuntary emissions of semen. In a few instances we have succeeded in arresting the nocturnal discharges, and thus effecting a cure, after Phosphorus had been employed without effect. We have seen good effects from its use in one case of profound melancholy in an aged female. In these instances the 12th dilution has always been selected. (10.)

In melancholy from general debility, or from some excessive drain upon the system, such as profuse perspiration, expectoration, leucorrhœa, &c.; in nervous irritation from the same causes, even when attended with dulness of the head, momentary loss of consciousness, in consequence of severe illness and great debility; dullness and weakness of intellect, with great discouragement and indolence of body and mind; and chronic dullness and confusion of the head, it has been found serviceable. (11.)

Sensorium.—Illusion of the senses. Dullness of the head. Vertigo when standing or walking. The head inclines to fall backwards and forwards. (1.)

Clinical Remarks.—Sundelin speaks highly of this acid as a remedy against hysteria, in young and nervous females. (10.) In heaviness of the head as if it were full of water; nervous vertigo, in greatly debilitated subjects. Chapman recommends it in the cases of literary, professional and political persons who will not believe that the brain is not made of brass, and continue to overtask it. (11.)

Sleep.—Yawning. Great drowsiness in the day time. Deep sleep, so that he can scarcely be roused in the morning. Falling asleep late in the evening. Early in the morning out of humor, weak and drowsy. Sleep disturbed by dreams. Moaning during sleep. Heat in the cheeks and ears before going to bed in the evening. (1.)

Head.—Dull headache, with buzzing in the head, worse on coughing. Excessively violent pressure in the head. Intermittent aching and stitching pain. Crampy,—compressive pain in the whole brain. (1.) Chronic morning headache in very debilitated and nervous persons, arising from so-called nervous debility. (11.)

PATHOLOGY.—In animals which have been poisoned with diluted Phosphoric-acid, no grossly evident lesions are found in the brain, or any other appearances which would indicate any special action upon this organ. The above symptoms therefore, should be regarded as arising rather from some more subtle and profound action upon the nervous substance itself, than upon its blood vessels.

Scalp.—Itching of the scalp; great falling off of the hair. (1.)

Clinical Remarks.—A chronic eruption upon the forehead and behind the ears, of two years' standing, attended with occasional itching, entirely disappeared in two months, in a lady who was taking the second dilution of the medicine for a pulmonary affection. (10.) A dilute preparation is a useful application when the hair falls out in consequence of the ravages of some scaly eruption of the scalp, such as ptyriasis, or chronic eczema; it should also be used internally, when the hair falls out after a severe fit of illness, attended or followed by great debility; or when the same result follows from great and long-continued anguish and grief; when the hair becomes thin, weak and greyish. (11.)

Eyes.—Pain, as if the eyeballs were compressed, and pressed into the head. Inflammation of the eyes, and styne on the upper eyelid. Smarting lachrymation of both eyes. Heaviness of the lids. Dilatation of the pupils. Dimness of sight. Black streaks before the eyes. The eyes are dazzled by looking at bright objects. (1.)

Clinical Remarks.—Mr. Balman has cured many cases of scrofulous ophthalmia with this remedy. This physician has often effected cures of this malady, after years of unsuccessful treatment with other drugs. He is in doubt whether to ascribe the cures to the tonic properties of the drug or to some change produced upon the blood, and through this upon the general system. (10.) It is also used against dimness of sight and great short-sightedness in consequence of onanism. Against ophthalmia with burning pains and great intolerance of sight. (11.)

Ears.—Stitches in the ear. Ringing, whizzing, roaring in the ears. For a long time musical sounds were disagreeable. (1.)

Clinical Remarks.—It is homœopathic to swelling and heat of the external ears; and to boils just within the meatus. It is useful when there is more difficulty in hearing sounds which are made close to the ears than those which are rather farther off, thus: when one does not hear distinctly the ticking of a watch held at a short distance from the ear; the ticking then seems changed into a kind of hissing noise, but it becomes more distinct when the watch is held at the distance of one and a half foot. (11.)

Nose.—Scurfs on the nose. Pimples on the tip of the nose. Swelling of the dorsum of the nose. (1.) Great dryness of the nostrils and suppression of all discharge from them; expulsion of bitter mucus from the posterior nares into the mouth and fauces; purulent discharge from the nose; fœtid smell from the nose; catarrhal fever with pains in all the limbs; violent coryza, with redness and soreness of the margins of the nostrils. (11.)

Clinical Remarks.—Scurfy eruptions upon the nose have frequently been cured with the acid. We saw one case of purulent and fœtid catarrh of the nostrils disappear under the use of the 1st dilution. (10.) In Frank's Magazine we find reported a cure of nasal hæmorrhage in a woman of sixty years of age, and where great prostration had resulted from repeated losses of blood, by the 2d dilution of the acid.

Face.—Pale face and hollow eyes when rising, with disposition to stare; blue margins around the eye. Burning pain in the skin of the cheek. Itching of the whole face. Large pimples on the face. Blotches upon the forehead. Burning and painful pimples upon both lips. (1.)

Clinical Remarks.—Improvement has resulted in several cases of eczema occurring in persons of a gouty diathesis. (10.) It seems indicated against the acne of the face, so common in young persons about the age of puberty; against red pimples on the face, forehead, chin, cheeks and nose, which subsequently change to pustules; against blotches on the forehead, moist scurf, eczema and herpes on the cheeks, lips and corners of the mouth; especially against obstinate and chronic fissures of the lips, such as occur in many nervous girls with disordered menstruation; ulceration and soreness of the vermilion border of the lips. (11.)

Jaws and Teeth.—Bleeding of the gums from the slightest contact. (1.)

Clinical Remarks.—It is a useful local application when the teeth are inclined to turn yellow; in scurvy of the gums, so that they swell and become painful; against retraction of the gums; gum-boils, and painful tubercles upon the gums. (11.)

Mouth.—Feeling of dryness on the tongue and palate, without thirst. Swelling of the tongue, and pain when talking. (1.) A peculiar odor in the breath. (44.)

Clinical Remarks.—It is useful against soreness and rawness of the mouth with great dryness; soreness, ulceration, burning and dryness of the tongue. (11.)

Pharynx and Œsophagus.—Smarting sensation in the throat. *Ulcerative* feeling in the throat; scraping in the throat, when swallowing. Dryness, painful soreness and rawness of the palate and velum; soreness and ulceration of the velum. In tonsillitis when suppuration threatens, and the pains become throbbing and shot up into the ears. Follicular inflammation of the throat with granulations and vesicles. (11.)

Clinical Remarks.—A lady who had been afflicted for many years with what was supposed to be a scrofulous ulceration of the throat, and who had taken numerous remedies without avail, recovered in two months under the use of the 6th dilution of Phosphoric-acid, repeated at intervals of twenty-four hours. (10.)

Taste and Appetite.—Putrid, flat taste. Violent thirst. (1.)

Clinical Remarks.—Dr. Paris asserts that the use of water acidulated with this acid is more efficacious in allaying the thirst so common in diabetes, than any of the other acidulated drinks. (10.)

Gastric Symptoms, and Stomach.—Pressure in the stomach, as from a load, with drowsiness; nausea, as if in the palate; vomiting of the ingesta, and afterwards vomiting every hour; oppression of the stomach before and after dinner; painful oppression when touching

the pit of the stomach; stitches with pressure in the pit of the stomach. (1.)

PATHOLOGY.—*In animals.* Mucous membrane of the stomach, in the pyloric region, of a deep red color; mucous membrane of the stomach of a reddish brown color; contents of the stomach fluid and having an acid reaction, in consequence of the presence of Muriatic-acid. (2.)

Clinical Remarks.—Distention and acidity of the stomach, with a sense of weight, and nausea after eating, may often be promptly relieved by this medicine. In relaxed and sensitive conditions of the stomach, dependent upon a general failure of the vital force, this drug at the 6th attenuation is an admirable remedy. Dr. Todd commends it highly in *cardialgia*. In weakness of the stomach, with a large secretion of ropy mucus, occurring in individuals of a phosphatic diathesis, Dr. Balman has employed it with decided benefit. (10.) It is especially useful when there is great dullness in the head after meals, with feeling of a load in the stomach, with excessive relaxation of the body and drowsiness. Against belching of wind, rumbling in the stomach and bowels, and such bloating and soreness about the waist that one does not want to button up his clothes. Gastric and bilious conditions with thick white or yellow coating of the tongue, flat, slimy or bitter taste; aversion to meat and soups, with much rumbling and looseness of the bowels. (11.)

Hypochondria.—Pain in the liver during menstruation; feeling of heaviness in the liver; stitches in the region of the liver and spleen; burning at one spot in the region of the liver; deficiency of bile in the stools; whitish-grey, red passages; very light yellow stools.

Clinical Remarks.—It has been used successfully against jaundice; in this disease it generally increases the quantity of urine, and quickly removes the bilious sediment. (11.)

Abdomen.—Pressure in several parts of the epigastrium; crampy pain in the abdomen; rumbling in the epigastrium and abdomen, gurgling in the abdomen; emission of a quantity of flatulence; pressure in the umbilical region; cutting pains across the abdomen, coming on at intervals. (1.)

PATHOLOGY —*In animals.* Deep redness of the mucous membrane of the duodenum. (2.)

Clinical Remarks.—Phosphoric-acid has often been prescribed successfully in chronic enlargement of the mesenteric glands, accompanied with diarrhœa, enlargement of the abdomen, rumbling in the epigastrium, and frequent pains in the abdomen. (11.)

Stool.—Frequent desire for stool; diarrhœa; white-grey diarrhœa; smarting of the anus after stool. (1.)

Clinical Remarks.—Good results have followed the use of phosphoric-acid in chronic diarrhœa, and in the diarrhœas of hectic fever. It is also a remedy of great value in the bowel complaints of scrofulous and rickety children, as it often reaches the remote general

symptoms, as well as the immediate and urgent ones. (10.) It is most homœopathic when the stools are whitish or greyish, or light yellow in color, more or less watery and mixed with indigested food; followed by piles with sweating, tearing, itching and gnawing pains in the rectum. (11.) Drysdale used it with good effects against the consecutive fever of asiatic cholera, and in the second stage where there was not much collapse; he gave it when there was much tossing of the head, fullness and rapidity of the pulse, frequent sighing, semi-stupor with contraction of the pupils, moist and furred tongue, some delirium and yellowish diarrhœa; also when there were whitish watery motions, vomiting every hour, white tongue, quick pulse, pale face, sunken eyes, and skin warm; also when there was restless tossing, semi-stupor, sunken features, frequent sighing and yellowish diarrhœa. (11.)

Urinary Organs.—Desire to urinate, with scanty emission; frequent micturition, the urine being either watery or dark with clouds; painful spasmodic constriction of the bladder, without urging. (1.)

Clinical Remarks. In all instances where there are phosphatic deposits in the urine, this acid is a chemical remedy of importance. Being a solvent of phosphate of lime, and passing from the blood into the kidneys and bladder unchanged, its remedial properties cannot be too highly appreciated. In cases of lithiasis and other maladies, therefore, attended with phosphatic deposits in the urine, it should be ranked among the first articles to be consulted. In diabetes, it sometimes allays the morbid thirst more effectually than any other remedy. (10.) It is homœopathic when the urine is pale, but soon forms thick white clouds; or when it is milky as if flour were stirred in it (phosphatic deposits); also when the urine is offensive and followed by a discharge like that of gonorrhœa, attended with redness and swelling of the orifice of the urethra. It has been used successfully in strangury and dysury, especially in old persons. Chapman has used it in cases of milky-urine in children, of which he has seen many cases, with immediate good effect; the urine has speedily become natural in appearance, and the children who were generally cachectic soon recovered flesh and health. In the diabetes chylosus of Hoffmann, a disease not uncommon in some parts of the West-Indies, he thinks it would probably prove specific. Dr. Sutherland has made some interesting remarks upon Phosphoric-acid and Phosphates in the urine. (11.) (See Brit. Journ. Hom., vol. 6., p. 410.)

Male Genital Organs.—Drawing soreness in the testicles as if excoriated; suppression of the sexual desire; frequent emissions; discharge of prostatic fluid when straining during stool; hardness and tension of the spermatic cord; falling out of the hair of the genitals. (1.)

Female Sexual Organs.—Leucorrhœa after the menses. (1.)

PATHOLOGY.—Uterus very red; sanguineous fluid in the vagina. (2.)

Clinical Remarks.—Homœopathic physicians have occasionally prescribed it against impotency arising from venereal excesses and from

old age. But whatever virtues it possesses as an aphrodisiac, are probably attributable to the Phosphorus it contains. We have observed curative effects from this acid in cases of this description, but our own experience is altogether in favor of the pure Phosphorus for this class of ailments. (10.)

In thin and acrid leucorrhœas it is often a prompt and satisfactory remedy. It is not so generally applicable in the different varieties of leucorrhœa as the Nitric-acid; but when the discharge is *thin* and *acid*, it is to be preferred. (11.)

Frank reports a cure of metrorrhagia, in a small and delicate woman after confinement, after other remedies had failed to relieve. The complaint had existed one week, and had reduced the patient to a very low condition. A few doses of the second dilution promptly cured her. (10.)

Chapman has found it very useful in the exhaustion from onanism, venereal excesses and nocturnal pollutions. (11.)

Larynx and Chest.—Pressure, oppression in the chest; violent pressure over the whole chest, in the night, shifting to the abdomen, and disappearing after emission of flatulence; violent hoarseness; cough with expectoration, smelling like herbs. (1.) The expirations from the lungs give out a peculiar odor. (44.)

PATHOLOGY.—*In animals.* Lungs and heart gorged with blood.

Clinical Remarks.—Phosphoric-acid possesses a marked influence over all secreting surfaces. Its special action upon the mucous membranes as well as upon the nervous system, is *stimulant*, and when homœopathically prescribed, *tonic*. It is therefore quite appropriate in many cases of chronic bronchitis, and sub-acute pulmonary affections. (10.)

It has been highly extolled by many medical men as a remedy in scrofula. Different physicians of eminence have advocated its employment in scrofulous ophthalmia, in hip-disease, in caries of the bones, in scrofulous eruptions, &c., and have reported excellent cures in corroboration of their opinions. We endorse their opinions for the following reasons.

In nearly all cases of pure scrofula, we find a deficiency of phosphorus. In the bones, in the blood, in the urine, in the whole organism, phosphatic salts exist in too small proportions. This deficiency has a direct effect to impair the strength and vigor of the body. As a deficiency of silex tends directly to deteriorate the size, strength, and nutritious properties of the grasses, and of certain other vegetable productions, so a deficiency of phosphates in the human organism tends to impair its stamina, and to operate as a predisposing cause of scrofulous maladies, rickets, &c. The phosphates are to the human body, what silica is to grass, the support, the stamina, the chief sustaining principle. (10.)

In support of my views upon this point I beg to mention the following fact.

My learned friend, Prof. Mapes, informs me that he employs seven-

ty men in manufacturing the super-phosphate of lime. Of this number, not one has ever died of any membranous, pulmonary, or bone disease, and if perchance any of them are attacked with colds, no coughs or other chronic condition ever results from the exposure. The professor believes with myself, that the constant inhalation of the phosphoric principle, imparts sufficient stamina to the mucous and pulmonic tissues, to enable them to resist the deleterious influence of colds and other morbid influences which might otherwise lead to serious maladies. (10.)

Dr. Hartmann recommends *Ac-ph.* in pneumonia of a slow and torpid character, especially when weakness with profuse sweats are predominant; when likewise diarrhœa, insensibility, strong, irregular and often-intermitting pulse with swelling of the veins; also in pneumonia-nervosa of middle aged persons, with purulent expectoration, abundant night-sweats, &c.

Dr. Rosenberg mentions *Ac-ph.* in the stage of purulent infiltration, also in pneumonia-typhosa with pale, sunken face, grasping around with the hands, hardness of hearing, dryness and blackness of the nostrils; bad taste in the mouth, diarrhœa, dry cough, hot skin, excessive weakness, oppression and shortness of breath; also in pneumonia-scorbutica.

Trinks has used it in many cases of cough with bloody expectoration. Altschul in profuse hæmoptysis, with burning, piercing pains in the chest, oppression of the lungs, fever and night sweats. (11.)

Thorax.—The following symptoms were relieved in the case of a woman thirty years of age, afflicted with inflammation of the lungs, oppressed breathing, dull pain in the breast, violent cough, sometimes attended with bloody expectoration, all aggravated by motion and when lying on the side, often forcing to her assume an erect position, which however was apt to be followed by vertigo, debility, restlessness; her eyes were staring, hearing hard; she had buzzing in the ears, inability to recollect, and delirium; her nose, mouth and tongue were dry, with violent thirst, pulse small and irregular. *Aconit.* 30. effected some improvement of the inflammatory symptoms; the remaining cough and nervousness were removed promptly by *Acid-phosph.*, so that the third day the patient was able to be out of bed.

2. A joiner, twenty years old, was attacked with pneumonia, and remained eight days without medical aid, his symptoms were: vertigo, headache, burning in the eyes; pulse 160; profuse night-sweats, sleep attended with heavy, restless dreams; chills alternating with heat; violent cough, with puriform expectoration and pain in the chest. *Digit.* brought down the pulse in two days to 120; but the other symptoms were unchanged. On the fourth day he relapsed and *Ac-ph. dilut. dr. j.* in five ounces of raspberry juice (one teaspoonful every third hour was given). After using up this quantity of medicine he was entirely well.

Back.—Intense pain in the small of the back, drawing, pressing, or

tearing, and worse when standing. Pinching, or drawing pains in the dorsal vertebræ. (1.)

Clinical Remarks.—For the reasons given under the head of larynx and chest, we consider Phosphoric-acid appropriate in caries and scrofulous affections of the vertebræ. In these maladies there is always a deficiency of Phosphoric-acid in the bones, and we know of no better means of supplying this deficiency than by the internal use of substances abounding in phosphates and which can be assimilated and appropriated by the affected parts. As internal remedies then, we suggest the drug under consideration, Phosphorus, and the phosphates; and a free use of milk and other articles containing phosphoric elements. Phosphoric-acid is found in a free state in the blood and urine, and is therefore in a better condition to unite with any alkali which may exist in the organism, than pure Phosphorus. (10.)

Upper Extremities.—Forearms painful as if bruised. Paralytic and crampy sensations in the arms. (1.)

Clinical Remarks.—The provings hitherto made with the acid show but few symptoms connected with either the upper or lower extremities; and so far as the arms are concerned, our clinical experience has been quite limited. From analogy, however, we should prescribe it in scrofulous and carious affections of the bones and joints of these organs as a chief remedy. Where there is a general softening of the bones, especially, should we expect good results from its use. (10.)

It has sometimes been employed successfully in caries of the bones as an external application. (10.)

Lower Extremities.—Itching ulcers on the leg. Dull paralytic pains in the tarsal joint. Boil on the nates. Pain in the hip-joint. Burning heat of the soles. Dull pressure on the thigh. (1.)

Clinical Remarks.—The maladies for which we would prescribe it are, hip-disease, white swelling, caries of either of the bones of the lower extremities, and softening of the bones from a lack of Phosphate of lime. Whenever we have administered it in scrofulous diseases of the joints, attended with profuse suppuration, it has had the effect to diminish materially the secretion, and thus enable the system to recuperate somewhat. As a remedy in these maladies we should rank it with *Silex* in point of value. (10.) In paralysis of the legs from onanism it is also useful.

In Frank's magazine we find the following case:—A lad of 16, scrofulous diathesis, received an injury upon his leg, which caused caries. At the end of four months, a large portion of the tibia, the upper part of the fibula, the patella, and the posterior part of the femur, were nearly destroyed. The cellular tissue was affected in proportion. The patient had paroxysms of hectic fever every afternoon, was very much emaciated, with an irritable pulse, night-sweats, irritating cough, and violent pains in the bones. A cure was effected with Phosphoric-acid in eight months.

Skin.—Formication of the whole body. Red spots on the upper and lower limbs. Rash over the whole body, more burning than itching. Smarting pain in the wounds, even in those of the bones. Itch-like pustules on the nates and toes. (1.) Great soreness and tenderness of the skin. Red blotches on the face, on the arms and legs, shoulders, abdomen, down to the umbilicus, hips and knees, such as occur in hysterical congestions, and in young women with menstrual, ovarian and uterine disorders. Boils, inveterate ulcers, with flat edges, indented bases, and secreting offensive and dirty pus. In malignant scarlatina and erysipelas.

Clinical Remarks.—At a high dilution this remedy is worthy of attention in several chronic eruptive disorders. A case of petechiæ is recorded in Frank's Magazine as cured by this drug. We have often seen it serviceable in burning, itching eruptions, occurring in old and gouty subjects. (10.)

Fever.—Feeling of coldness, with chilly feeling and coldness in the abdomen, attacks of shuddering, in the evening, followed by exhausting sweats, general feeling of chilliness, coldness, followed by heat.—Profuse morning-sweat. (1.)

Clinical Remarks. In hectic fevers, arising from profuse suppurations, from scrofulous affections and caries, it is a remedy of great value. Under its use in cases of this description, we have often seen both the suppuration and the hectic subside, and even in cases where a cure did not ultimately result, life has been prolonged and the comfort of the patient much subserved. (10.)

In *gastric fever*, with pain and dullness in the head, thick and white-coated tongue, bad smell from the mouth, putrid taste, inclination to diarrhœa, great general languor and prostration, restless and unrefreshing sleep, exhausting night-sweats, thick urine with deposit of a great deal of mucus. (11.)

In *typhoid fever*, especially in not very malignant cases, when there is much nervousness, slight sopor, some fever, with redness of the cheeks, heat and dryness of the skin, followed by profuse and debilitating sweats; in the severest cases Rhus, Arsenicum and Muriatic-acid must be used. (11.)

General Symptoms.—Bruised sensation in the hips, arms, thighs, and nape of the neck, as if caused by too rapid growth. Languor of the body, inactivity of the mind, mental oppression. (4.) Scrofulous affections, caries. Bad consequences of too rapid growth. Bone-pains. Sensitiveness to cool air. Weakness all over—nervous weakness. Tumultuous movements of the blood. Bad effects of grief, chagrin, care, and anxiety. (1.)

ACIDUM SULPHURICUM.

SULPHURIC ACID.

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TOXICOLOGICAL EFFECTS.

Tartra considers that four varieties may be observed: 1st, speedy death from violent corrosion and inflammation; 2d, slow death from a *peculiar organic disease* of the stomach and bowels; 3d, imperfect recovery, the person remaining liable ever after to irritability of the stomach; 4th, perfect recovery. (9.)

First Form.

The most ordinary symptoms are those of the most violent gastritis, accompanied with burning in the throat, which is increased by pressure, swallowing or coughing; eructations produced from the gases evolved in the stomach by the chemical action of the acid; excruciating pain in the stomach, such as few or no natural inflammations can excite. The lips are commonly shrivelled, at first whitish, but afterwards brownish; occasionally there are also excoriations, more rarely little blisters. Similar marks appear on other parts of the skin with which the acid may have come in contact, such as the cheeks, neck, breast, or fingers; and these marks undergo the same changes of color as the marks on the lips. Christison had an opportunity of witnessing this in the case of a man who was cruelly burnt on the face, as well as on the hands, which he had raised to protect his face; the marks were at first white, but in sixteen hours became brownish.

The inside of the mouth is also generally shrivelled, white and often more or less corroded; the teeth are apt to become loose and yellowish brown about the coronæ. Occasionally the tongue, gums and inside of the cheeks are white, and as it were polished, like ivory. (9.)

There is almost always great difficulty, and sometimes complete impossibility of swallowing; fluids taken by the mouth may be returned by the nose, for the pharynx may become so much contracted as only to admit a probe with difficulty. (9.)

The matter vomited is generally brownish or black, afterwards this matter is mixed with shreds of membrane, which resemble the coats of the stomach, and sometimes actually consists of the disorganized coats, but are generally nothing more than coagulated mucus. (9.)

The *bowels* are obstinately costive; the urine scanty or suppressed, and the patient is frequently harassed by distressing tenesmus and desire to pass water. (9.)

The *pulse* is all along very weak, sometimes intermitting, and towards the close, imperceptible; it is not always very frequent, on the contrary, it has been observed of natural frequency, small and feeble. (9.)

The countenance becomes at an early period glazed and ghastly; and the extremities cold and clammy.

The *breathing* is often laborious, owing to the movements of the chest increasing the pain in the stomach; or because inflammation of the lungs is also at times present; or because the admission of air into the lungs is impeded by the inflammation and swelling of the epiglottis and entrance to the larynx; to these symptoms are added occasional *fits of suffocation from shreds of thick mucus sticking in the throat*, and sometimes CROUPY respiration, with sense of impending choking. (9.)

Sometimes, especially when a very large dose has been swallowed, instead of these excruciating tortures, there is a deceitful tranquillity and absence of all uneasiness, as in gangrene of the stomach and bowels; there may be a good deal of pain and vomiting at first, followed by a subsidence of all the usual violent symptoms, except tenesmus and excessive debility. (9.)

Occasionally eruptions break out over the body. (9.)

Death is seldom owing to the mere local mischief, more generally to sympathy of the circulation and nervous system with that injury. Bouchardat supposes that death arises from absorption of a sufficient quantity of acid in the blood to cause coagulation of that fluid. (9.)

Death generally takes place in from twelve hours to three days; sometimes life is prolonged for seven or fourteen days. (9.)

ANTIDOTES. Chalk, magnesia, solution of soap, milk, or oleaginous matters; alkaline bicarbonates, such as carbonate of potassa, provided they be given with mucilaginous fluids and syrup, in rather a concentrated form; *Liquor-potassæ*. (9.) A solution of carbonate of potash and sugar, followed by an oily emulsion with magnesia has cured very severe cases; milk with potash or lime water, should be the only diet for many days.

Second Form.

It begins with the symptoms already noticed; but these gradually abate:

The patient then becomes affected with: general fever, dry skin, spasms and pain in the limbs, difficult breathing, tension of the belly, salivation, and occasional vomiting, particularly of food and drink. Afterwards *membranous flakes* are discharged by vomiting, and salivation is accompanied by fetor. These flakes are often very like the mucous membrane of the stomach and bowels, and such they have often been described to be; more probably, however, they are of adventitious formation, for the mere mucous coat of the alimentary canal cannot supply the vast quantity that is evacuated. In fact a *true croupous*

inflammation of the throat, œsophagus, stomach and bowels is often set up. Still, there is no doubt that the lining membrane of the alimentary canal is occasionally discharged; in fact Dr. Wilson has mentioned an instance of the ejection by coughing of about nine inches of the cylindrical lining of the pharynx and gullet. (11.)

Digestion is deranged, the whole functions of the body are languid, and the patient falls into a state of marasmus, which reduces him to a mere skeleton. The patient may live for eight months; the vomiting of the membranous flakes continuing to the last. (9.)

Third Form.

The primary symptoms are mild, but the patient continues for life liable to attacks of pain in the stomach, vomiting of food and general disorder of the digestive functions.

Fourth Form.

This merely comprehends the cases of perfect recovery; these are more frequent than one would suppose; of fifty-five cases, twenty-six died, nineteen of the primary, and seven of the secondary disorder; twenty-nine recovered, and twenty-one of these perfectly.

Fifth Form.

In this variety the injury is confined to the pharynx, œsophagus and larynx. (11.)

In one case the patient was unable to swallow for a fortnight.

In another, there was complete dysphagia from stricture in the gullet.

In other instances there is inflammation and spasm of the glottis and larynx.

In one case there was thickening of the epiglottis, great contraction of the upper opening of the larynx, and inflammation extending down the trachea into the bronchial tubes. (9.)

In other cases, both the œsophagus and larynx may be involved; the first symptoms, besides great general depression, were croupy respiration and much dyspnoea, which became so urgent that laryngotomy was performed. (9.)

Among the other effects of this and other acids *scirrhus pylorus* must also be mentioned; Boulland has related an instance of death from *scirrhus pylorus* in its most aggravated shape, which supervened on the chronic form of the effects of this and nitric-acid. (9.)

A nurse's milk, impregnated with Sulphuric-acid, is supposed to exert the most deleterious effects upon the infant; continued griping, green diarrhoea and fatal marasmus are said to ensue.

When poured into the ear, a large eschar may come away, followed by profuse hæmorrhage, which may recur almost daily for a month; then complete palsy of the arm may follow, succeeded finally by tremors and incomplete palsy of the whole of one side of the body; the whole petrous portion of the temporal bone may be found carious. (9.) It may prove the most homœopathic remedy to caries of the bones of the ear and consequent disease of the brain. It should be used internally and externally. (11.)

Mind and Disposition.—Loud screaming. Great anguish and restlessness. Not inclined to talk. Happily disposed. Great uneasiness. (4.) Despondency. Melancholy. Ill-humor. Sadness. (1.)

Sensorium.—Perfect consciousness. Fainting. Feeling of faintness. Vertigo. Prostration. Transient delirium. Unconsciousness. (4.) Oppressive dullness of the head. (1.) Mental faculties unimpaired. (2.)

Head.—Headache. (4.) Pressure in the forehead. Constriction of the forehead, first increasing, and then disappearing suddenly. Drawing headache. Sensation in the forehead as if the brain were loose and were falling to and fro. Stitching and grumbling in the temples. (1.)

PATHOLOGY.—Softening of the cortical substance of the brain. Dura-mater, sinuses and pia-mater distended with blood. Pia-mater covered with lymph. Cerebrum covered with red blood-spots. Lateral ventricles contained about a drachm of liquid. Choroid plexus very dark. Under the tentorium and in vertebral canal were found about three ounces of watery exudation. Membranes of the brain very much thickened and opaque. Membranes of the brain here and there firmly adhering to the same. Sinuses filled with black blood. (4.)

Clinical Remarks.—The 6th dilution of this acid has several times afforded permanent relief in obstinate constitutional headaches, occurring in cachectic individuals. It has proved particularly useful in those cases which have been accompanied by profuse and debilitating leucorrhœal discharges.

Sleep.—Easily disturbed sleep. Transient delirium. (4.)

Eyes.—Pupils very much dilated. Eyes protruded from their socket,—*without expression*, and sunken. Wild, fiery expression of the eyes. Eyes sparkling. Distorted look of the eyes. Eyes dim. Staring expression. Pupils somewhat contracted. (4.) Lachrymation. Dim-sightedness in the morning. Stinging itching in the lower lids. (1.) If Sulph.-ac. be dropped upon a mucous membrane a coagulated film is produced at once. (11.)

Clinical Remarks.—It is one of the most homœopathic remedies for opacities of the cornea; it may be applied externally, when sufficiently diluted. (11.) In *ectropium* the local application of the strong acid to the eyelid has been substituted for the scissors. (44.)

Face and Lips.—Frightful expression. Dark blue appearance of the face. Cold clammy sweat. Pale face. Icy-coldness of the face. Wretched expression of the face. Most anxious expression. Puffiness of the face. Feverish heat. Red face. Changeable color of the face. Lips swollen and inflamed. Blueish color of the face. Convulsive movements of the muscles of the face and lips. Lips pale and shriveled. Hippocratic expression. Face deathly pale and cold. Face red and swollen. (4.)

Teeth.—Crumbling off of the teeth. Covered with a tough black-yellowish mucus. Grinding of the teeth. Naturally white teeth, stained brown. (4.) Pain of the sub-maxillary glands, the pain

affecting even the tongue. The teeth are set on edge the whole afternoon. (1.)

Tongue.—Mucous membrane of the tongue white; tongue swollen, but moist. Shriveled, puckered appearance of the tongue. Tongue red on the borders. Tongue thickly coated with a grey-whitish crust. Tongue dry, and covered with thick yellow scabs. Blisters on the tongue. Tongue pale. (4.)

PATHOLOGY.—The mucous membrane corroded in different places. Tongue very much swollen, and covered a cheesy mass. (4.)

Mouth, Throat and Œsophagus.—Mucous membrane of the mouth and œsophagus corroded. Violent pain in the œsophagus. Violent burning pain in the mouth and the œsophagus. Mucous membrane of the lips, tongue and mouth, white, shriveled and puckered. Inability to swallow anything. Tongue swollen, with puckered appearance of the mucous membrane. Spasms of the pharynx. *Isthmus faucium* and pharynx darkened. Difficulty of deglutition. Foaming of the mouth. Constriction of the œsophagus. Frequent eructations. Painful deglutition. Lock jaw. Painful inclination to swallow all the time. Corners of the mouth covered with a thick slimy crust. Spasms of the glottis on attempting to swallow. Gangrenous appearance of the tonsils. Dysphagia. Constriction of the œsophagus and stomach. Small blisters on the tongue and in different parts of the mouth. Foul smell from the mouth. The interior of the mouth covered with brown and white crusts. Violent inflammation of the organs of deglutition. The inner mouth almost denuded of mucous membrane. Considerable excoriation of the mucous membranes of the mouth, fauces, &c. (4.) Rough and contractive sensation in the throat. (1.)

PATHOLOGY.—Membrane of the mouth uncommonly white and indurated, and in some places corroded. Tunica villosa of the œsophagus and stomach detached. Tonsils and soft palate of a yellowish white color and shriveled. The whole mucous membrane of the œsophagus corroded. Behind the larynx a stricture so that the œsophagus presented an opening not larger than a feather quill. Pharynx very much constricted, and denuded of epithelium. (4.)

Clinical Remarks.—It is one of the most homœopathic remedies for *croupous inflammation* of the pharynx, larynx, trachea and œsophagus. Also for gangrenous or putrid inflammation or ulceration of the throat; in syphilitic angina; in the malignant angina of scarlet fever; also for stricture of the œsophagus. (11.) In Mercurial ptyalism Mr. Pearson found great benefit from this acid.

Appetite.—Aversion to food and drinks. Want of appetite. (4.) Aversion to food, disappearing in the evening. (1.)

Stomach.—Violent corroding pain in the stomach. Vomiting after drinking. Vomiting. Aversion to any kind of drinks. Vomiting of blood. Vomiting of slime and mattery fluid. Burning in the stomach.

Choking sensation during the act of vomiting. Vomiting of a large quantity of foamy slime. Regurgitation of food. After eating, pain in the region of the stomach, with swelling of the size of a child's head. Stomach tender on pressure. After eating, pain and pressure in the region of the stomach, relieved by vomiting. Convulsive vomiting of blood. Vomiting of black flocculent fluid. Black vomit. Distention of the stomach. Vomiting of coagulable lymph and destroyed membranes. (4.) Coolness and relaxed feeling of the stomach. Sensitiveness in the region of the stomach. (1.)

PATHOLOGY.—Tunica villosa detached. Muscular coat of the stomach and duodenum much inflamed. Posterior part and pyloric orifice of the stomach disorganized. Stomach diminished in size with several cicatrices, and some ulcers in process of healing. *Mucous membrane of the pylorus very much thickened. Puckered, shriveled appearance of the stomach.* Stomach perforated. (4.) It seems to exert a specific action upon the pylorus, causing thickening both of the mucous and muscular coat. (11.)

Clinical Remarks.—It is one of the most homœopathic remedies for the most severe inflammations and ulcerations of the stomach; also against scirrhus of the pylorus; excessive acidity and water brash; chronic vomiting and indigestion; perforating ulcer of the stomach; *gastro-malacia*; and perhaps against *sarcinæ ventriculæ*; it is also homœopathic to hæmorrhagic gastritis. (11.)

Diaphragm.—**Clinical Remarks.**—During a long practice, Dr. Schneider has met with many cases of hiccough, occurring in both sexes, and at all ages, persisting with such obstinacy as to give rise to great suffering and exhaustion. His sovereign remedy in such cases is dilute Sulphuric-acid; it acts with great promptitude. (12.)

Abdomen.—Epigastrium very tender to the touch. Abdomen soft, without pain or heat. Muscles of the abdomen contracted; with colicky pain. Violent pain in the abdomen. Abdomen very tender to the touch. Distention of the hypochondriac region. Abdomen tympanitic. Cutting pain in the abdomen. Muscles of the abdomen hard and rigid. (4.)

PATHOLOGY.—Inner surface of the intestines were covered with brownish-black thick fluid. The lower part of the spleen blackish-brown and as if corroded by the acid. Mesentery mostly destroyed. Spleen dark red. Liver bloodless. *Liver very much enlarged.* Small intestines distended with gas and inflamed. Omentum, liver, intestines and peritoneum highly inflamed. Mucous membrane of the duodenum thickened. *Gastro-epiploica, dextra and sinistra* and its branches, also superior mesenteric filled with dark coagula. (4.)

Clinical Remarks.—It is homœopathic to great enlargement of the liver; to peritonitis. (11.) In colica pictonum and poisoning by lead generally, Sulphuric-acid is supposed by Gendrin to be almost specific; this opinion has been ably supported by Dr. H. Bennett; mild cases yield in three days, severe ones in six; the first few doses may

be vomited off, but tolerance is soon established; the abdominal pains generally begin to diminish after the first or second day, the constipation gradually giving way when the pains become less intense. The Sulphuric-acid drink will prevent lead colic; in a large establishment not a single case occurred in fifteen months. (44.)

Stool.—Constipation. Diarrhœic stools. Bloody stools. Stools black, mixed with blood. Involuntary stools. (4.) From the first to the seventh day the stools are apt to be hard and like slacked lime; from this to the thirteenth day they may assume an ash color, and finally become natural. (11.)

Clinical Remarks.—In diarrhœa, cholera and dysentery Sulphuric-acid is said to be more efficacious than alkalies, tonics, opiates and astringents, in a proportion greatly exceeding ten to one.

In these diseases its beneficial action, especially in children, is more rapid in a proportion greatly exceeding twenty to one.

It seems to act by increasing the tone of the mucous membrane, rather than by simply astringing its pores. The worse the case, the more rapid and marvellous seems to be the cure.

Dr. Müller reports 27 cases of diarrhœa, some extremely bad and wanting little of the intensity of Asiatic cholera; several were in infants; all of these cases recovered although some of them seemed perfectly exhausted by diarrhœa and vomiting, the eyes were sunken and death seemed near. (13.) Dr. Sheppard treated fifty cases of diarrhœa successfully, many of them severe, some few were the very worst forms of English cholera. (13.)

Dr. North thinks it most useful when the symptoms are severe, with a tendency to lapse into a low fever, when the attack arises without any error in diet, the diarrhœa being profuse, soon becoming like dirty water, with nausea and vomiting of a large quantity of fluid, severe spasmodic pains in the stomach and bowels, cramps in the limbs, often violent, pulse small and frequent, skin cold and clammy, countenance anxious; these symptoms being followed by a continued fever for a few days or a week or two. (14.)

Dr. Fuller of St. George's Hospital thinks it is a specific against the *choleraic diarrhœa*; in bilious diarrhœa and some chronic diarrhœas it is of little or no avail. It relieves vomiting, purging, and cramps, generally within three or four hours, and convalescence follows speedily; the change is effected with such marvellous rapidity that he who in the morning is utterly prostrate, in the evening experiences little ill effect from his fearful seizure. (14.)

In passive diarrhœa from a relaxed condition of the mucous membrane of the bowels it is very useful; also in puerperal diarrhœa depending upon intestinal irritation; it often effectually restrains the diarrhœa, improves the condition of the tongue, particularly if there are aphthous ulcerations. (44.)

In the Provincial Med. and Surg. Journal of Sept. 15, 1852, p. 471, we find an interesting paper by Dr. Edgar Sheppard, upon the value of Sulphuric-acid as a remedy in diarrhœa and dysentery. During a

period of six weeks Dr. S. treated upwards of fifty cases, many of them being of a very severe character, and the conclusion he derives from his experience are as follows:

"1st. The treatment of diarrhœas and dysenteries by Sulphuric-acid is more efficacious than that by alkalies, opiates, and astringents in a proportion greatly exceeding ten to one."

"2d. It is more rapid in its action (especially in children) in a proportion greatly exceeding twenty to one."

"3d. It seems to act in a more rational, and (if I may so express myself) scientific manner, by increasing the tone of the mucous membrane of the alimentary canal, rather than by astringing the pores." (!)

"4th. The worse the case, the more rapid and marvellous seems to be the cure—a most striking feature as compared with the treatment by chalk and opium."

An examination of the symptoms of these cases proves that the remedy was in nearly every instance *homœopathic*; and the conclusion forces itself upon us that our allopathic friend consulted Jahr, instead of his own authorities in selecting his medicine. (10.)

Urinary Organs.—Frequent inclination to make water, but passing a few drops only at a time. Urine red, high colored. Diminished secretion of urine. Involuntary emissions of urine. (4.) A boy, aged nine years, took \mathfrak{zj} . of strong Sulphuric-acid; during the first three days his urine was found to contain a large quantity of Sulphuric-acid, amounting to about 133 grains of monohydrated Sulphuric-acid, equivalent to $1\frac{3}{4}$ ounce of acid.-sulph.-dilat. of the London Pharmacopœia. (11.)

Clinical Remarks.—A weak solution forms a capital injection in chronic gonorrhœa and gleet. (11.) In calculous affections, in the phosphatic diathesis, and when the urine is alkaline, Sulphuric-acid has in many cases proved successful, but it is generally inferior to the Nitro-muriatic-acid. (44.) In those derangements of the system which give rise to alkaline conditions of the urine, the totality of symptoms will often correspond with the pathogenetic phenomena of Sulphuric or some other acid. In such cases, we are in the habit of prescribing the higher dilutions, and for the most part with benefit. (10.)

Female genital Organs.—Catamenia suppressed. (4.) Menses too early, and too profuse. (1.)

Clinical Remarks.—In leucorrhœa occurring in cachectic constitutions the Sulphuric-acid is sometimes very successful; (44.) it may also be used as an injection, especially when there are abrasions or aphthous ulcerations of the cervix uteri. (11.) Uterine hæmorrhage, after miscarriage, has several times been promptly arrested by Frank. The same gentleman has likewise controlled severe hæmorrhages, arising from partial detachments of the placenta.

Larynx and Trachea.—Troublesome night-cough. Cough. Inability to speak. Loss of voice. Hoarseness of the voice. Larynx painful to the touch. Cough with rattling in the chest. Cough excited by liquids. Irritating cough. Violent choking spells, with croupy cough. Cough with putrid expectoration. (4.)

PATHOLOGY.—Mucous membrane of the trachea and bronchial tubes much inflamed. (4.) Epiglottis covered with a thick layer *like false membrane*; epiglottis of a deep scarlet red color, intensely inflamed, but not corroded; ulceration of the larynx and trachea. (11.)

Clinical Remarks.—It is one of the most homœopathic remedies against true membranous croup; also ulceration and stricture of the larynx. (11.)

Thorax.—Stertorous breathing, with difficulty of swallowing. Violent burning pain in precordial region. Sighing respiration. Respiration retarded (*voix très-basse, soufflée*). Tenderness on pressure in the precordial region. Respirations short and frequent. Palpitation of the heart. Great difficulty of respiration. Pain during inspiration. Sensation as if something were boiling in the chest. Cramps of the chest. Whistling, wheezing noise during inspiration. Dyspnœa, great anguish in the precordial region. Violent deep seated pain in the chest. Great pain in the precordial region. (4.) Pressure in the left chest, and pit of the stomach. (1.)

PATHOLOGY.—Lungs more pale than natural. Very much collapsed and bloodless. Lungs normal, not collapsed. Pericardium filled with a quantity of yellowish fluid. Right auricle and ventricle filled with blood. Left side of the heart and aorta empty. Veins very much distended with blood. Both pleuræ inflamed with the usual product of inflammation. Both lungs very much inflamed and hepatized. Coronary artery distended with thick coagulated blood. The right side of the thorax contained much bloody serum. *Heart atrophied*; auricles empty. (4.)

Clinical Remarks.—It is homœopathic to dropsy of the chest; inflammation of the lungs and pleura; to hæmorrhagic pleurisy; and to dropsy of the pericardium. (11.) In the profuse perspirations and expectorations of phthisis the dilute acid proves highly useful; Elliotson has seen it check the most severe forms; Christison remarks that no internal remedy equals Sulphuric-acid. (44.)

Upper Extremities.—Arms cold, and covered with cold clammy perspiration. (4.)

Clinical Remarks.—In paralysis, chronic rheumatism, and chronic affection of the joints, especially in morbus-coxarius great benefit is stated to have been derived from the persevering use of Sulphuric-acid ointment (*Acid ʒj.; lard ʒj.*) (44.) Against the debilitating sweats arising from necroses of the bones of the extremities, it is an excellent remedy. (10.)

Lower Extremities.—Lower extremities cold, and covered with cold clammy perspiration. General coldness. Icy coldness of the lower extremities. Spasms. (4.)

Clinical Remarks.—Sulphuric-acid sometimes proves serviceable in scrofulous affections of the joints, when the cartilages and ligaments have become seriously involved, with profuse suppuration, debilitating

perspiration, and other hectic symptoms. In these instances, we have derived most benefit from the use of the 6th to the 12th dilution. (10.)

Pulse.—Pulse frequent and intermittent. Pulse small, weak not frequent, hardly perceptible; pulse full, tense; pulse trembling, sometimes slow, then again quick and wiry. Small, weak, trembling pulse; hard, quick pulse. (4.) Small, quick pulse. (1.)

Fever.—Feverish. Feverish towards evening. Internal heat with external coldness. Violent inflammatory fever. Alternately fever and chill. Fever with delirium, and congestion of the head. Fever with great restlessness. High degree of fever. (4.)

Clinical Remarks.—In the advanced stages of continued fevers, and in typhus fever the use of Sulph.-acid appears to be of great service. Professor Huss found that when there was profound prostration with commencing bed sores and persistent diarrhœa, Sulphuric-acid was productive of much benefit. (44.)

We are much in the habit of prescribing this acid against the diarrhœas which occur during the progress of typhoid and scarlet fevers. Experience in these cases induces us to employ the first dilution

Dr. Leon of New-Orleans has found the first dilution of the acid eminently successful, in diarrhœas of infants, and in aphthous conditions, after Sulphur and other remedies have failed. (10.)

In true *petechial typhus fever* the celebrated Rademacher recommends it almost as a specific. It was introduced by Professor Reich in 1799 as a specific against all fevers; but of course it soon fell into disuse; but Rademacher had used it successfully in large doses, as early as 1795, in the true typhus fever; and found it useless against all other varieties, even the typhoid. He had used it previously in small doses in combination with other remedies, but he first gave it alone to a poor apprentice, who had violent fever, large black petechiæ, and constant hæmorrhage from the nose; the bleeding from the nose soon became so profuse that it threatened to kill the patient. Rademacher then gave an entire ounce of Acid-Sulph., dilut. at one dose, in as little water as possible. This checked the hæmorrhage at once; the patient continued to use as much of the acid as he could possibly get down, using about the equivalent of a half ounce of the concentrated acid in a dilute form. This patient recovered in one-third of the usual time required under other remedies.

Rademacher continued to follow this treatment for over forty years, and always with success. He remarks that after the acid has been used freely for three or four days, loose stools are apt to occur, and the fæces have a dark green color. The first passages may be offensive, but the later ones are not at all so; when this diarrhœa occurs the quantity of Sulph.-acid should be diminished to a half or even a quarter the usual quantity; in fact the patients generally become tired of it at this time and are very glad to diminish the quantity. The fever will be found much lessened; the petechiæ become of a lighter

color. Some few patients could not retain the Sulph.-acid but vomited it off; these received full doses of Tartaric-acid. When the vomiting arose from an affection of the stomach, and not from disgust for the Sulph.-acid, a tablespoonful of spirits was given every one or two hours; this was also given when the patient was very weak; also when there was great delirium or tendency to coma, with or without Camphor. He has relieved the most violent delirium with Sulph.-acid in full quantities, and Spirits of Camphor. The most severe and almost hopeless cases seem to have recovered in Rademacher's hands under this treatment. (11.)

Thirst.—Violent thirst. Thirst with inability to swallow, spasms of the glottis on attempting to swallow; burning thirst. (4.)

Skin.—Skin dry and hot; coldness of the skin; cold clammy sweat; pale and cold skin; skin cold to the touch, with internal heat. (4.) Pain in the outer parts of the head as if from subcutaneous ulceration, the parts being painful to the touch. (10.) A peculiar looking, half-petechial and half miliary eruption on the chest, arms and abdomen is not uncommon. (11.) Itching over the body here and there. (1.)

Clinical Remarks.—In confluent small pox when the pustules are filled with a bloody sanies, and the urine contains portions of broken-down coagulæ of blood, Sulph.-acid is stated by Dr. Thompson to be a remedy of the highest value, and indeed the only one which can be relied upon. (44.)

In scarlet fever it is also very useful. In some cutaneous diseases the internal use of this acid proves highly beneficial; it will cure itch, when other remedies fail; in pruritis it has been used with the best effects; also in lichen and urticaria; in eczema, and tinea-capitis, it may be used internally and externally; in ephelides and freckles the diluted acid is recommended by Bateman. (44.)

General Symptoms.—The whole body covered with cold clammy perspiration. Attacks of epilepsy with congestion of the brain. General paralysis, spasms, singultus; convulsions. Rigidity of the spinal column and lower extremities; patient lying on his back. Great emaciation. Sinking of strength. Trembling of the body. Spasms. Icy coldness of the body. Insensibility. Lock-jaw. Food or drinks seldom reached the stomach, for they were vomited up before getting into this organ. Heat of the whole body. (4.)

Peculiarities.—After the radial pulse had ceased for some time, the pulsations of the heart could be felt distinctly. Pain increased on motion and pressure. (4.)

PATHOLOGY.—The blood in all the vessels was found coagulated. Lower extremities rigid, upper extremities limber. (4.)

ACIDUM TANNICUM.

TANNIC ACID.

The experience with this remedy is mainly clinical and palliative.

AUTHORITIES.

Waring's Therapeutics (44.)—Dunghlison's New Remedies (16.)
—Wood and Bache (7.)—Peters (11.)

Eyes.—*Clinical Remarks.*—Huter affirms that it is very serviceable in most cases of Egyptian ophthalmia (16.). Hairion speaks highly of the efficacy of a strong solution (one part to three of water), in acute and chronic conjunctivitis, granular lids and vascular cornea, granulating vegetations, corneitis, with or without ulcerations, chemosis and pannus, especially in the latter disease; still much milder preparations are generally preferred, viz., one part of Tannin to twenty, thirty or fifty parts of water. Cummins regards it as preferable to all other applications in the purulent ophthalmia of infants. (44. 11.)

Nose.—*Clinical Remarks.*—In Epistaxis the powder may be blown into the nostrils through a quill (44.) It has also been used successfully against chronic catarrh and coryza. (11.)

Mouth.—*Clinical Remarks.*—In hæmorrhage from the gums it may be applied locally in powder or in solution; also in mercurial salivation and sponginess of the gums. (44.)

Teeth.—*Clinical Remarks.*—Druitt has found it of great service in toothache; a little cotton wool imbued with a solution of a scruple of Tannic-acid and five grains of Mastich in two fluid drachms of ether may be put into the cavity; he says if the toothache is to be cured at all, this plan will put an end to it in nine cases out of ten; although other authorities prefer a mixture of Tannic-acid and Morphine. (44.)

Throat.—*Clinical Remarks.*—Mignot uses from two to ten parts of Tannin mixed with ten parts of sugar, blown into the throat to facilitate the expulsion of false membranes (16.) Allison recommends it in relaxation of the palate and throat. (44.)

Stomach.—*Clinical Remarks.*—In dyspepsia it is said to prove very efficacious, the appetite increases, flatus and sense of distention abate, and in some instances the bowels, far from becoming constipated, acquire a more healthy tone and *actually become more free*. It has also been used against the hyperemesis induced by Ipecac.; and in hæmorrhage from the stomach. (44.)

Bowels.—*Clinical Remarks.*—In chronic diarrhœa which has resisted all ordinary treatment it has proved of surprising efficacy; in severe cases depending on an irritable, relaxed and weakly mucous

membrane Allison has not known one failure; and of those cases connected with chronic inflammation or ulceration of the mucous membrane, only two proved beyond the influence of the remedy. It has been used successfully against hæmorrhage from the bowels, even when arising from the ulceration of typhoid fever; also against the hæmorrhage of dysentery; in prolapsus-ani, bleeding and enlarged piles. (44.) It is homœopathic to some forms of constipation. (11.)

Urinary Organs.—*Clinical Remarks.* In hæmaturia Rees says, it is the best remedy he knows of. Giadorow details two cases of diabetes cured by it, when given in combination with opium; Dumas extols it in the same disease; a rapid and decided improvement is often obtained in ten or twelve days. Allison has used it successfully in albuminuria. Dr. J. Redman Coxe has frequently used *Gallic-acid* with success in some forms of albuminuria, and as often without success; but the form of urinary disease in which he has found it most useful, is that in which the urine is loaded with a thick, dirty cream-colored mucus, which after standing five or six hours emits a very fetid smell; where the urine is passed with much straining; when the kidneys are very painful (a bruise-like pain), and the distress seems to follow the course of the ureters into the bladder; and when there is a dull heavy pain in the bladder, directly over the pubis; in nearly all such cases he has derived much benefit from *Gallic-acid* in the first, second, and third decimal triturations; when the Gallic-acid failed, he often found *Berberis* of great use. *Benzoic-acid*, on the other hand has been found most useful in catarrh of the bladder, and in cases where there exists a secretion of granular mucus mixed with phosphates; also in chronic dysuria, incidental chiefly to persons in the decline of life, or in the so-called dysuria senilis; combined or in alternation in the *Copaiba*, *Benzoic-acid* has been used when there is vesical irritation and increased secretion from the mucous membrane; it diminishes and often completely removes the muco-purulent deposit. (44.)

Genital Organs.—*Clinical Remarks.*—In gonorrhœa and gleet Ricord and Allison have used it with benefit; in atonic leucorrhœa it has been used internally with the effect of restraining the discharge and restoring the tone of the system; two or three grains in solution, combined with a small portion of dilute Nitric-acid is a favorite internal and external remedy. In syphilitic ulceration of the cervix-uteri it was first proposed by Ricord and strongly advised by Grandcourt. (44.) In a case of open and almost incurable cancerous ulceration, in which it was applied to arrest the bleeding, it seemed to excite a wonderful effect on the ulcer and cancer itself. In menorrhagia, Porta says: 1. that whenever the womb is the seat of irritation, giving rise to active hæmorrhage, and also when this discharge depends upon chronic metritis, Tannic-acid will act specifically upon the womb; 2. when the discharge depends on organic disease it has no efficacy; 3. when acute inflammation is present, other remedies ought to be used first. Ferrario does not consider it adapted for cases in which either partial

or general plethora, or local excitement or any organic disease exists; it is indicated only when mere atony is present: then the effect is generally good, the hæmorrhage diminishes and soon ceases, the general strength augments, and recovery succeeds without any disturbance of the stomach or other functions. Richter, however, says he has given it in habitual metrorrhagia without any effect whatever.

Chest.—*Clinical Remarks.*—Cavavia says that of all the effects of Tannic-acid, two of the most surprising are, the cures effected by it in cases of obstinate nervous cough and in phthisis. In the chronic stage of hooping cough it is recommended by Schegondi, in quarter grain doses every two hours, in alternation with Conium; the paroxysms soon ceased entirely. Durr found it very efficacious in combination with equal parts of Benzoin, and fifty parts of sugar. Allison advises it in chronic bronchial catarrh, occurring in weakly and elderly persons, attended with copious and debilitating expectoration; it first greatly and gradually abates the secretion, then relieves the frequent paroxysms of cough and improves the strength. In the second stage of phthisis it is said to be very useful, when there are softened tubercles and much bronchial catarrh; also when large cavities are present, with large quantities of purulent matter mixed with blood; it controls the discharge, and lessens the wear and tear of the system. In the profuse perspirations of phthisis, Allison and Charvet found its efficacy very striking. (44.)

In *osmidrosis* Wilson found it to correct the fetor of the perspiration after other means had failed. (44.)

Breasts.—To sore nipples a solution of five grains to ℥j. of water is spoken of by Druitt as a very efficacious application. (44.); but the Tinct. Benzoin is far more useful. (11.)

In *nervous diseases*, debility, languor and excitability it is said to be a permanent nervine. (44.)

In *rachitis*, Allison has the highest opinion of the internal use of Tannic-acid, in doses of a half or one grain, two or three times a day; he has employed it in numerous cases and thinks that it not only possesses the power of arresting the progress of the disease, but also of correcting or preventing the tendency to it; it appears to have been signally beneficial in his hands. (44.)

In *some obstinate skin diseases*, and to ulcers with copious discharge it has been found of great service; also in porrigo decalvans. (44.)

ACIDUM TARTARICUM.

TARTARIC ACID.

AUTHORITIES.

Ranking's Abstract. (13.) Journal de la Société Gallicane, April, 1855. (15.) Waring's Therapeutics. (44.) Peters. (11.) Vogt's Mat. Med. (20.)

TOXICOLOGICAL EFFECTS.

A man, aged twenty-four, purchased what he supposed to be an ounce of "tasteless salts," or Tartrate of Soda, but received Tartaric-acid by mistake; he dissolved it in a half pint of warm water and drank it off at once; he instantly exclaimed that he was poisoned; that he had a burning sensation in his throat as if from oil of vitriol; complained of being all on fire; he took soda and magnesia; vomiting soon set in, and violent inflammation of the stomach and bowels ensued; the vomiting never ceased during life. (13.)

Pathological appearances.—Intense inflammatory action throughout nearly the whole alimentary canal. (13.)

Devergie thinks it induces death by asphyxia rather than by the local lesions it causes. (13.)

The asphyxia, however, is produced by the absorption and passage into the blood of the Tartaric-acid. (13.)

It also exerts a special influence on the lungs, in which it gives rise to *partial congestions, approaching to hepatizations*, which are disseminated amidst the healthy tissue. (13.)

It exerts a special influence on the blood, seeming to augment its fluidity, while it modifies its nature; so that the blood assumes, when exposed to the air, a bright red currant color, which it communicates to the different organs, in proportion as it is freely distributed to them. The blood also remains fluid for an extremely long period. (13.)

PHARMACEUTICAL USES.

Tartaric-acid has been recommended as a better solvent for Quinine than diluted Sulph.-ac.; one-third of the weight of the Quinine is a sufficient proportion of the Tartaric-acid to effect a complete solution, which is by no means unpleasant to the taste, a great improvement on the intense bitterness of the ordinary solution of this salt, made with diluted Sulph.-ac. In this connection we may also mention that accident led Dr. Thomas, several years ago to the discovery that the bitter of Quinine may be effectually concealed, while the efficacy of the drug is retained by combining it with *Tannic-acid*; ten grains of Quinine may thus be deprived of its taste by $1\frac{1}{2}$ grains of *Tannic-acid*. (13.)

THEORETICAL INFERENCES.

Vogt infers that it approaches the neutral salts in its action, and

holds a position somewhere between the antiseptic and antiphlogistic remedies; in fact he assumes that its action is a compound one, resembling both that of the acids and neutral salts; thus it is said to increase the secretion of the gastro-intestinal mucous membrane, to act upon the whole portal system and upon the liver, and also upon the arterial system; in fact it is assumed to have decided cooling and antiphlogistic properties, and to exert an especial influence upon the secretion of bile and upon the whole portal system, particularly when general plethora aids the local congestions and stagnations in these organs. (20.)

It is regarded as most indicated when there is a proclivity towards sthenic disorder, when increased venosity is associated with plethora, in short, when vegetable acids and neutral salts are both required. From its mildness it is often used as a dietetic remedy or drink, in the same way that vinegar often is, only it may be used in more decidedly inflammatory cases. (20.)

It has been especially recommended in *inflammatory bilious affections*, in bilious fevers of an inflammatory nature, in bilious inflammatory dysentery, cholera, &c. Also in chronic affections of the liver, such as jaundice; and in fact in persons who are both bilious and plethoric, with a tendency to inflammation. (20.)

In hæmorrhoidal affections in irritable subjects, in those who have a mobile vascular system, and incline to inflammation, in short, in those who are both plethoric and weak. (20.)

In inflammatory dropsies, or rather in dropsies associated with general plethora and a sthenic habit of body. (20.)

In inflammatory affections of the urinary organs, viz. in inflammatory dysuria and strangury. (20.)

Dose.—In the allopathic school from ten to twenty grains; as a drink, one or two drachms may be put in two pints of water. (20.)

PHENOMENA.

Mind.—Dullness and lassitude. (15.)

Mouth—Burning of the lips; the lips become brown and blackish at their internal border; continual dryness of the lips, one is obliged to moisten them frequently; burning in the upper lip; teeth on edge; pasty taste in the mouth in the morning. Excessive thirst; brownness and dryness of the tongue. (15.)

Clinical Remarks.—Singularity enough this remedy is generally regarded as a refrigerant, and is said to form an agreeable refrigerant drink in inflammatory and febrile diseases, when largely diluted with water and sweetened to taste; still Drs. Thompson and Waring tell us: when it causes redness and dryness of the tongue, it ought to be discontinued. It promises to be homœopathic to typhoid fever. (11.)

Stomach.—Nausea, eructations; repeated and almost incessant vomiting; vomiting of grass green substances. (15.)

Clinical Remarks.—Singularly enough in the dominant school it is recommended in irritability of the stomach, nausea and vomiting; effervescing draughts prepared with Tartaric-acid are often very effectual in allaying morbid irritation of the stomach. In dyspepsia and other diseases attended with copious secretion of mucus, it is stated by Morgan of Glasgow to be of the highest service. Annesley says it is the best solvent of mucus and may be advantageously given when this exists largely in the stomach and bowels. (44.)

Bowels.—It is more apt to produce colic and to purge than Citric-acid; pinching pains in the abdomen, and about the navel with emission of flatulence; sensation of coldness in the abdomen; frequent stools during the night; pain in the umbilical region; the faecal matters had the appearance of coffee grounds. (15.)

Clinical Remarks.—It seems homœopathic to febris mucosa; to typhoid fever, when attended with redness and dryness of the tongue, sordes upon the lips, and much diarrhœa. (11.) It has been advised in dysentery, and mucous states of the stomach and bowels. (44.)

Kidneys.—Acute pain in the region of the kidneys. (15.)

Larynx.—Roughness and scraping in the larynx. (15.)

Fever.—Frequent yawning; chilliness; coldness in the abdomen; general lassitude, especially in the legs; general chilliness in the evening while in bed; excessive thirst; tongue brown and dry; pulse feeble. (15.)

Clinical Remarks.—See above.

Limbs.—Great fatigue in the evening; is scarcely able to stand; great weakness in the legs and thighs; tearing pain in the soles of the feet. (15.)

Spine.—Its morbid influence in persons laboring under affections of the spine is more constant and evident than that occasionally resulting from the employment of Citric-acid; indeed so obvious is this that patients sometimes refuse to continue taking it, on account of the nervous agitation it causes. (44.)

Mucous Membranes.—It is said by Annesley to be the best solvent of mucus, and may be given advantageously in mucous states of the stomach and bowels; in mucous fevers, &c. (44.) But the muriate of Ammonia is perhaps the most decided mucous remedy; also Hydriodate of Potash; Agaricus is peculiarly indicated when there are discharges of yellow mucus from the bowels. (11.)

Dropsy.—The most severe and inveterate cases of dropsy of the chest, abdomen, anasarca, and even ovarian dropsy have been cured with Citric-acid and Lemon-juice. Dose, one tablespoonful every two, three or four hours. The successful use of this remedy in rheumatism is well known. In Frank's Magazine eight cases of confirmed dropsy are reported cured by Lemon-juice; it probably acts in the same way as the Tartrate of Potash, or Cream of Tartar, for Lemon-juice is merely a Citrate of Potash. (11.)

ACONITUM NAPELLUS.

ACONITE. (Monk's Hood.)

AUTHORITIES.

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TOXICOLOGICAL EFFECTS.

Case 1.—A healthy Irish woman, aged 25, took a tablespoonful of strong Tincture of Aconite Root, by mistake.

Symptoms.—Face flushed (probably from running) pupils dilated, though sensitive to light; pulse frequent, soft and weak, the beat being sometimes so feeble as to be almost imperceptible; feeling of fullness about the limbs, as if they were about to burst, accompanied by a sensation of numbness and pricking over the whole surface; numbness and tingling of the tongue, and a strange sensation about the throat; no sickness at stomach, and head clear.

Treatment.—Sulph., Zinc and Ipecac. caused free vomiting of partly digested food; pulse was still frequent, 120, feeble, the beats continuing irregular in force; felt very weak; in three hours the dilatation of the pupils had passed away, but the numbness and tingling remained. The next day she was well. Probably the presence of food in the stomach prevented any more serious effect from so large a dose of the poison. The case was peculiar on account of the dilatation of the pupils. (17.)

Case 2.—A woman took a teaspoonful of the saturated Tinct. of Root; in fifteen minutes she had retching and burning pain in the stomach; skin cold; pulse 100, feeble and regular; fingers spasmodically extended; convulsions of the whole body frequent, but of short duration; mind not particularly affected.

Treatment.—Ipecac., followed by free vomiting; frictions with Ammonia and mustard; copious draughts of arrow root; some brandy and ether.

In three hours the burning pain in stomach and bowels was not so severe; pain in the throat, chest, and lower part of spine; almost incessant retching and spitting; respiration irregular and spasmodic; pulse feeble, 120, intermitting after every second stroke; general convulsions lasting about five minutes, and frequent slight spasms of various parts, especially of the fingers; pupils dilated, but contractile on exposure to strong light; mind clear.

Treatment.—Twenty drops of Tinct. Opium was given occasionally;

she immediately became more comfortable; the spasms and other symptoms became less severe; by night her pulse had become regular; and on the next day she was well. (17.)

Case 3.—From twenty-five minims of saturated Tinct., a tingling sensation in his arms and hands; the arms and hands became so powerless that he could not keep them up; walked and rode about in various places, then vomited freely, his speech became thick, and he staggered like a person intoxicated, though there was neither stupor nor loss of consciousness; his gait and appearance were those of an intoxicated man, but when he spoke, which he did with some effort, his articulation was so distinct, and his conversation so intelligent, that any idea of intoxication was dispelled. He complained of a general feeling of discomfort and illness; of tingling and numbness in the muscles of the face, and of dragging down, especially towards the left side. His face was not hot, neither was his skin cold, although the weather was cold and stormy; pulse about 90, and of fair strength. He was again carted about in a cab, and soon presented the appearance of a person dead drunk; he vomited twice; shortly afterwards he became convulsed, pale and pulseless, and at length retaining his consciousness to the last, he died in three hours from the time of taking the Aconite.

Pathological Appearances.—Congestions of the brain, lungs and right side of the heart.

Remarks.—The case is peculiar from the small quantity which caused death; and the treatment seems to have been totally inadequate, while the frequent removals of the patient in his weak state were highly injudicious. (18.)

Case 4.—This case is peculiarly interesting as being the first recorded case of poisoning with *Aconitine*; a gentleman took two and a half grains; he must have fallen almost immediately, and struck his head against the furniture; either the poison or the blow must have caused violent vomiting, as the floor of his room was found flooded with vomited matter; in eight hours the patient was fearfully collapsed, the skin cold, sweating and quite pale; the heart's action almost imperceptible; pupils acted; no paralysis; intellect unimpaired; but he suffered from severe vomiting, which recurred every two or three minutes, and was performed by a sudden jerking action of the abdominal muscles, accompanied by a loud shout, probably dependent upon a sudden contraction of the diaphragm. Every attempt to swallow was followed by the spasmodic contractions so characteristic of hydrophobia, but they were not renewed by the sight of water. All these convulsive movements were, however, easily excited by simply touching him.

Treatment.—Warm bath, turpentine enema, and mustard poultices; the pulse became more perceptible towards evening and the patient calmer; but as the spasms were still easily excited by any attempt to swallow, he had enemas of beef tea, yolk of egg, and ten drops of

laudanum. He passed the night in a state of spasms and exhaustion, but his intellect was most perfect, even vivid; after a hard struggle he seemed out of danger the next day.

Remarks.—The constant and repeated vomiting, great depression of the circulation and spasmodic state of the muscles are symptoms to be expected in these cases; in large and fatal doses complete insensibility or stupor almost amounting to it, has been observed in many instances, while in the present case the intellect remained perfect and even acute; the recovery from this large dose, two and a half grains, is probably owing to the early and severe vomiting. (13.)

Case 5.—A woman, aged 84, was soon attacked with distress at the stomach, followed by vomiting, dryness of the throat, with a burning sensation which extended to the stomach, *prickling* over the whole body, and confusion of the head; in a half hour she had: distress at the stomach, retching and occasional vomiting, cold extremities, pulse small and 140, pupils contracted, countenance anxious, skin covered with a cold sweat, great uneasiness, and tossing about from side to side. It was impossible for her to retain anything on her stomach, and her restlessness was so great that warm external applications could scarcely be applied. She soon began to have convulsions; the upper extremities being more affected than the lower; after being convulsed for a half hour she had a most violent fit, which left her comatose; breathing was stertorous, pupils dilated and insensible to light, pulse 40, entire loss of consciousness for five hours; then her limbs began to get warm, pulse quickened, with some return of sensibility. The next day she seemed quite well, and from being deaf before this, her hearing was much improved. This case differs from the majority; the patient had coma, whereas the mental faculties are usually not much disordered and consciousness generally remains until a few moments before death; the convulsions were also more severe in this case than common, for they are generally spasmodic movements merely, rather than convulsions, and in some cases even these movements do not occur.

Case 6.—A powerful man took forty grammes of Tinct. of Aconite; he immediately felt a warmth and contraction of the throat; great restlessness, which would not allow him to remain still a minute; constant complaints of burning in the throat and œsophagus; mind clear; senses undisturbed; tongue whitish; some nausea; no colic. Among the first symptoms was a constant movement of the legs, both while sitting and walking (a kind of chorea.) Very violent pain in the throat; excessive restlessness, and fear of death. Tartar-emetic caused repeated and profuse vomiting.

At the end of two and a half hours patient could no longer stand up, and was attacked with convulsions, in which the arms and legs were drawn inwards, his fingers were strongly clenched over the turned-in thumbs, his feet were in a state of permanent abduction; there were no convulsive shocks or jerks. His face was covered with a sticky cold sweat, eyes turned upwards, so that only the whites

could be seen, and his expression was frightful; no pulse was to be felt in the radial or temporal arteries. The attack lasted three minutes, and then the patient expressed all the agony and fear which he experienced; he thought that his last hour had come. His understanding was clear; but he was quite blind. Slight and constant nausea was followed by the above convulsions; then occurred extraordinary timidity and an intermission of the convulsions and nausea. Another dose of Tartar-emetic was followed by repeated and profuse vomitings for a quarter of an hour, but without any relief to the symptoms.

In two hours more his sight had returned, but his convulsions were as frequent and frightful as ever; the temperature of his skin fell more and more; after several attacks of chills, he became almost icy cold, his face hippocratic, head violently bent backwards; during the spasms his joints cracked, his respiration became rattling; during the intervals there was a mucous rattle in the chest. While in this agonized state the patient readily understood all that was said to him, and had no pain in the abdomen; his wrists and forearms were quite insensible from the first spasm; so that quite deep needle pricks were not felt.

At the end of six and a half hours in all, reaction first commenced, his heart and pulse began to beat again, warmth and some comfort returned; in one hour more a profuse warm sweat, return of feeling in the arms and free breathing sat in. An expression of surprise and stupidity remained upon his face for several days. (18.)

Case 7.—CLADIUS RICHARD poisoned a robber, who had been condemned to death, at the command of the Emperor of Austria, in 1524. Dose one *drachm*. Immediately oppression of the chest set in; stomach-ache; vertiginous dimness of vision, without alteration of the pulse; great weakness; vomiting attended with anxiety; pain in the occiput and neck; transient delirium, during which he whistled upon a leaf. When the delirium passed away he complained of pain in the stomach and head, in the jaws, chest, and here and there in the joints; after the lapse of seven hours *all his joints were painful*. The abdomen swelled as if tympanitic or dropsical; the hypochondria were tense, hard, and painful to touch; stitches in the kidneys, with the retention of urine. One arm and leg became paralyzed; the pulse was *often intermitting* and feeble. During the day he vomited and purged several times, and complained constantly of *aching and coldness* in the stomach, as if a stone lay there. To the astonishment of all, he was finally attacked with so frightful and painful an inflammation of the eyes, with lachrymation, that he rather wished himself dead than to be forced to endure such agony long. In the course of eight hours more, all signs of poisoning ceased, and the next morning he was quite well, and remained so. (21.)

Case 8.—In 1561 MATTHIOLUS was ordered to poison a condemned robber with Aconite. Dose two *drachms*. In three hours complained of a bruised and festered feeling of the whole body, excessive powerlessness, heaviness about the region of the heart; although he retained his consciousness, had a bright look, and spoke firmly, yet a cold

sweat broke out upon his forehead, and the pulse was scarcely perceptible; soon his eyes turned up, his mouth was drawn to one side, his neck became stiff, and he swooned away; he had several stools while unconscious. When he came to, he complained of coldness; he vomited offensive, blackish, bilious matters with great relief; finally he became silent, and died without any other occurrence, except that his face became blue, as from strangulation. (21.)

Case 9.—Shortly after, MATTHIOLUS poisoned another robber with one drachm of Napellus. It caused a peppery feeling in the mouth; in an hour he vomited green bile, felt as if a cold ball lay in the stomach, then ascended from thence and spread a cool air over the vertex and occiput. Afterwards the left arm and thigh felt as if paralyzed, he lost all power of moving them, but could move his left hand a little. Next he recovered the use of his left side, and the right became affected in the same manner. This paralysis was transient, and affected either side alternately; thus, when he could lift the right arm he could not move the left, and vice versa; finally he recovered the use of both arms. Felt as if *all the blood in his veins was frozen*; then became dizzy, *with burning in the head, as if the skull were filled with boiling water.* Convulsions of the eyes and mouth, and such violent pains in the jaws that he held fast to them in the fear that they would fall off. His eyes bulged, his face became blue and his lips black, while the abdomen was swollen, as if from dropsy. His pulse and spirits varied with the intensity of the symptoms; at times he was in despair, at others he thought he would recover; at times he was perfectly conscious, at other delirious; at times he wept, at others he sang; his speech remained free all the time. He was perfectly blind three times, and recovered his sight; three times he thought he was about to die, but at the end of seven hours all signs of poisoning ceased, his pulse and skin became natural, and he recovered his strength in a short time. (21.)

Case 10.—VINCENZ BACON was called to a person who had eaten Aconite in mistake for celery. He soon became unwell, vomited the larger portion of his meal, but still the symptoms of poisoning increased. Bacon found him in bed, his eyes fixed, teeth closed spasmodically, his hands, feet, and forehead covered with cold sweat, his pulse scarcely to be felt, his breathing short and almost imperceptible; his head was bent backwards. Spirits of Hartshorn induced coughing and vomiting, the latter followed by swooning, which could not be prevented. Other medicines made him vomit and purge, after which his stomach and bowels felt better, but his head was so heavy, and his strength and spirits so exhausted, that he was forced to lie down again. His pulse now became more perceptible, *but was still intermitting and irregular*; at times two or three beats followed each other quickly, and were succeeded by as long, or a longer intermission. He gradually improved, felt cold and chilly, covered himself up warmly, thus causing a pleasant warmth over his limbs, followed by a moderate sweat, after which he slept quietly for four or five hours and awoke quite refreshed.

This patient first felt *a tingling heat in the tongue and jaws*, with such alteration of sensation in his face, that *neither his friends nor the looking-glass could convince him that his face was not enlarged to twice its natural size*. This tingling sensation gradually extended farther until it involved the whole of the body, especially the extremities. He felt weakness and unsteadiness of the joints, especially of the knees, and a jerking of the tendons, which scarcely allowed him to walk across the room. He thought he noticed *a cessation or intermission of the circulation of the blood*; he felt no circulation at all from the wrists to the tips of the fingers, nor from the ankle to the toes. He had no inclination to vomit until after he had taken oil. At a later period he became dizzy, had darkness before his eyes, his look became wandering, had an incessant roaring and hissing sound in the ears, till finally the above described state of unconsciousness set in. (21.)

Case 11.—A healthy woman took, for a slight syphilitic affection of the nipples, eleven drachms of extract of Aconite in the course of four days, when her appetite, which had been quite good, failed, and *her skin became slightly yellow*. The next day she took an entire ounce of extract of Aconite, and *the jaundiced condition became still more evident*. On the following day she took another ounce; the yellow color of the skin became darker, she complained of nausea, vomiting, and loss appetite; she was forced to take to her bed. During the night she had nausea, vomiting and delirium; her features were much altered, she became blind, and could hear with great difficulty; still her physicians administered another dose of half an ounce. She now became very restless and excessively anxious, left her bed several times, and was unable to lie down again without assistance; she was tied down in bed, but no more Aconite was forced upon her. The same day she lost all power of speech, lay in a stupefied state with her eyes closed, the muscles of her face convulsed, lock-jaw, *slow and difficult respiration, pulse quick and irregular*, the skin burning hot. She was bled sixteen ounces; the jaundice diminished somewhat, but the other symptoms increased, and the abdomen became swollen. She was bled a second time, the blood drawn had a *yellow surface* with soft crust. She bled a third time and received forty-eight grains of Antimony, but she grew worse; the soporose condition and difficult respiration, with rattling in the trachea continued until death.

The brain was found filled with blood, none of which, however, was extravasated; the stomach covered with black, gangrenous spots. (18.)

Case 12.—PALLAS details five cases in which five persons each drank a glass of whiskey, by mistake, in which Aconite root had been macerated. Three of them died in the course of three hours, after experiencing a burning sensation in the throat and abdomen, inclination to vomit, followed by vomiting and purging, with pains in the stomach and abdomen; their faces were bloated, their abdomens swollen.

Post-mortem.—Throat, stomach and bowels were very red and inflamed. The blood vessels, especially the veins of the abdomen, were

remarkably distended with blood. The omentum was very much inflamed, and *a great deal of serum was found in the cavity of the peritoneum*. The lungs were heavy, blueish, of a violet color posteriorly; they crepitated but little, and were filled with blood (venous congestion of the lungs, rather than inflammation.) The brain was much injected; some of the blood was coagulated and some fluid. (21.)

Case 13.—A little boy, aged one year, swallowed a piece of the root of Aconite. It caused vomiting, with great inclination to stupor; the child seemed to be in pain; *its pulse was slow and intermitting*; its pupils dilated.

Case 14.—BALDRIANI in a letter to PROFESSOR GIACOMINI, of Padua, details the phenomena of twelve cases of accidental poisoning with three ounces each of juice of Aconite. One patient, aged sixty, experienced great anxiety and oppression of the chest, with vomituration; the anxiety increased rapidly, his strength succumbed quickly, and patient soon died. Two elderly women had great oppression of the chest, then fell into convulsions, followed by almost paralytic weakness; death in two and a half hours.

Post mortems of the three.—Distension of the abdomen; marked blueness of the nails of the fingers and toes. The vessels, especially of the pia-mater and arachnoid much injected; serous effusion beneath the meninges and at the base of the brain; no fluid in the ventricles. The lungs, especially their lower lobes, filled with *black* blood; the heart flabby, and containing but little *black, fluid* blood; the large blood vessels almost empty; liver normal; gall bladder contained but little watery, yellowish bile; spleen lax and softened; stomach distended, and containing a moderate quantity of viscid, blackish-green substance; its mucous membrane irregularly reddened at several places, especially at its fundus and greater curvature. Duodenum and small intestines contained a considerable quantity of the same viscid, greenish matters, and exhibited similar red spots in various places; the kidneys somewhat congested; the bladder almost empty.

The nine other patients experienced *rapid* sinking of the physical powers with simultaneous depression of the mental; the face was remarkably pale, with alteration of the features, blue circles around the dull eyes, and dilated pupils; vertigo with drawing, dull headache, especially in the occiput; some painful tension of the abdomen with rumbling, vomiting of greenish matters, and in one, diarrhœa of the same character; feeling of oppression and anxiety in the chest; general coldness, which increased rapidly especially in the limbs, and attended with blueness of the finger and toe nails; some cramps in the calves of the legs; *pulse so small and weak, that in some it was not to be felt at all*.

The unusual exhaustion, the great paleness and coldness of the body, the feeble, almost imperceptible pulse; &c., led to the use of *stimulants, and all nine recovered*; the pulse rose gradually, general warmth returned, strength increased, the anxiety ceased, respiration

became freer, and in a few hours all signs of poisoning had disappeared, without the occurrence of any violent arterial or febrile reaction. (18.)

Case 15.—DR. SHERWIN witnessed and details a case of poisoning in a servant girl, with the tincture of the root. She first felt *piercing and prickling* in the arms and fingers; then numbness in the shoulders, tongue and mouth; finally also in the thighs and feet. Next she thought that her face was swollen, so that she looked in the glass and found her face to be blue and distorted; her throat grew tight; next her legs failed her, and she fell down upon the steps, where she was found and carried to bed. When Dr. S. arrived, she was lying on her back, with fixed eyes, contracted pupils, livid countenance, stiffness of the jaws, *coldness and pulselessness of the limbs; short, imperfect, difficult respiration; feeble beating of the heart.* At times sighing, tossing of the arms, rattling and vibration in the trachea set in.

An emetic of half a drachm sulph. zinc, caused a fit of convulsions in which the eyes were turned up under the lids, the fists pressed against the chest, the teeth clenched, and thick frothy saliva was forced between the lips; twice, after vomiting, her sight became better and pulse stronger; but after a bilious vomit, the pulse again became imperceptible, the patient complained of great oppression of the heart and præcordia, jugular veins were distended. Was bled twenty ozs.; scarcely had ten ozs. been drawn before she felt better, her countenance became natural, breathing more free, she said it seemed to her as if she had been brought out of a small, dark, hot room, into a large, light one; slight vomiting again set in, the pulse became fuller, *but was only fifty-eight, and intermitted every fourth beat; gradually it rose to seventy, and finally to one hundred, the skin becoming hot and dry.* On the following day her pulse still remained small, she slept but little, tongue was coated, headache, numbness of the hands, &c. (8.)

Case 16.—DR. PEREYRA of Bordeaux, treated a man who had chronic rheumatism of seven months' standing, with five grs. of *old* extract of Aconite, night and morning, with considerable benefit. Five grains of *fresh* extract caused in a quarter of an hour, as was usual, a peculiar trembling and crawling in the limbs, attended with piercing pains; but these, instead of ceasing in the course of half an hour, as was customary, became more violent, and the trembling of the limbs increased to true convulsions. In the mouth and throat the patient had an acrid, peppery taste; he soon vomited freely. During the convulsions he lost his consciousness; when he recovered it, his eyes were blinded, and he had a fixed headache, as if a hot iron were bound around the head. The convulsions were followed by *profuse sweat.* *The pulse was irregular and slow.* Five hours after his face was pale, with an expression of anxiety and restlessness; his eyes moved rapidly; he was impatient, tossed about, and changed his position frequently; spoke readily and quickly; his tongue was cold, as in cholera-patients; had burning in the throat; vomiting of slimy matters; orthopnœa; respiration twenty-five; *pulse fifty-four, unequal soft and full, as if the blood did not fill the arteries.* Mucous rattle a.

posterior portion of lungs. The heart presented several remarkable symptoms; its apex struck the walls of the chest only once, while the pulse gave three evident beats, and still the contractions of the left ventricle were simultaneous with the pulse beats. The right auricle seemed to be in a constant convulsive state, for its actions were quick, irregular and disproportionate to the beats of the ventricles. His limbs gradually began to grow cold. *Stimulants were given* with a view to excite and sustain reaction of the circulation and respiration. The attempt succeeded, and the next day the patient was well, and without a trace of his rheumatism.

Case 17.—Another patient died in four hours after taking five grains of fresh extract; severe pains, gradual cessation of circulation and respiration. The most prominent symptoms were, intense burning pain in the throat, vomiting, cold sweats, fearfulness, anxious tossing about, swoonings, gradual cessation of circulation and respiration, small pulse, &c.

Post-mortem.—Expression of fright on the countenance; veins of the cerebral membranes much injected; the brain itself covered with *blackish* points: the lungs choked with *black* blood, and almost without crepitation; heart almost empty the right (venous side) filled with a thick, currant-jelly-like, gelatinous mass of blood. Stomach exhibited traces of considerable congestion, of brownish color. The liver and spleen gorged with *black* blood. (22.)

Case 18.—DR. DEVAY, of Lyons, witnessed a case of poisoning with thirty-two scruples of Tinct. Aconite. Immediately the patient experience warmth and contraction of the throat; one grain of emetine did not cause vomiting; became excessively anxious and restless, could not remain quiet in one place for a moment, and complained incessantly of his throat, and of burning along the œsophagus. His anxiety was so great that he could not remain still; if ordered to sit down, he arose immediately, and the doctor was forced to follow him around the room. His mental and sensual functions were undisturbed; his tongue whitish; nausea; no pain in the bowels. The primitive action of the drug seemed to fall upon the lower limbs, *which were in incessant motion*, even while sitting; when he walked, his legs trembled so as to give him a peculiar staggering gait; he had violent pain in the throat, and exhibited excessive restlessness and fear of death. Two and a half hours after, he could not hold himself upright, and was attacked with a peculiar variety of convulsions, viz., the upper and lower extremities were forcibly drawn inwards, the fingers clenched and thumbs turned in so as to form a fist; the legs were in a state of persistent adduction; all this time there was not the slightest concussion; the face was covered with a cold viscid sweat, the eyes turned up so that only their whites were to be seen. *No pulse was to be felt in the radial or temporal arteries*; the paroxysm lasted about three minutes, was attended with cracking of the joints and succeeded by exhaustion. He experienced and expressed very great anxiety; thought that his last hour was come; his intellect was

generally unclouded, except at intervals when he fell into a state of stupefaction, closed his eyes, let his head sink, and then rose up again with a motion similar to that made by one who has fallen asleep in a wagon and then suddenly awakes; but he was perfectly blind and could distinguish neither persons nor objects around him. He again vomited, had constant nausea, and was again attacked with convulsions. In two hours more the patient had recovered his sight, but the convulsions were as frequent and more severe than before; the temperature of his skin sank lower every moment; he experienced several shudderings and soon after became icy cold, with hippocratic countenance and violent retraction of the head backwards; respiration stertorous; mucous rattle heard at a distance; still, notwithstanding his agonizing condition, he heard everything that was said to him, and had not the slightest pain in the abdomen; soon after the first attack of convulsions, *the palms of his hands became so insensible that he did not feel deep pricks with a needle.* He remained in this condition for two hours longer, when the heart and pulse beats again became perceptible; warmth and general comfort returned; in an hour more his appearance had improved, a profuse, warm sweat broke out, pulse rose to 125, sensation had returned in both palms of the hands, and respiration was free and easy. After a short sleep patient awoke with a general bruised feeling; injections brought away black and very offensive fæces; urine was scanty and very turbid; abdomen not at all painful; tongue moist and white. For several days the patient's features bore the marks of fright and stupidity. (22.)

Case 19.—WEPFER poisoned a small dog, three weeks old, with half a drachm of fresh Aconite. Death in three or four hours.

Post-mortem.—Stomach contained coagulated milk; pale, frothy and viscid mucus; its internal surface was white and did not exhibit the slightest trace to inflammation. Both the venous and arterial blood was very fluid; the cavities of the heart were empty; the bladder distended with urine. (21.)

Case 20.—WEPFER also poisoned a young wolf, six months old, with four drachms of Aconite root. Death in two or three hours.

Post-mortem.—Esophagus so much distended with flatus as to compress the larynx and trachea; lungs pale red, soft, and completely collapsed; the whole internal surface of the stomach, with the exception of the cardiac and pyloric orifices, was inflamed, as was also the case with the larger portion of the mucous membrane of the bowels; the *veins* of the abdomen were over-filled with blood; the liver blackish red; the gall bladder distended with bile; the spleen somewhat paler than the liver, and its surface wrinkled; the bladder completely collapsed; some fluid and a great deal of coagulated blood in the right side of the heart, while the left side was almost empty.

Case 21.—ORFILA poisoned a dog with two drachms of the watery extract of Aconite. Death on the third day.

Post-mortem.—Brain and alimentary canal natural; the lungs dense,

brownish, filled with blood, and less crepitating than natural; either pulmonary apoplexy, or pneumonia. (21.)

Case 22.—ORFILA applied one and a half drachms of watery extract of Aconite to a wound in the thigh of a dog. Death in three hours.

Post-mortem.—The wound was scarcely inflamed; alimentary canal natural; heart lax, and containing dense black blood; the lungs rose-red and crepitating. (21.)

Case 23.—Dr LOEWY of Vienna, poisoned a rabbit with 610 drops of tincture of Aconite. Death on the fifth day.

Post-mortem.—The internal surface of the skin presented a very evident arbriform injection of its veins; the brain and its vessels were congested; the tongue had a yellow coating; the throat was in a state of punctated red injection; the œsophagus traversed with congested vessels; the surface of the lungs was covered with *dark red* spots, which extended into its substance, the cut surface of which effused a reddish-brown viscid fluid (reminds one of the rusty expectoration of pneumonia and splenization); the ventricles and auricles of the heart were filled with *black* coagulated blood; liver large, and covered with similar spots to those found on, and in the lungs; stomach and bowels not inflamed, the former containing chyme, the latter, fluid substances; spermatic chord and testes congested. (21.)

Case 24.—Dr. LOEWY poisoned another rabbit with 520 drops of the tincture of Aconite.

Post-mortem.—Internal surface of the skin presented a remarkable degree of arbriform injection, at the terminal branches of the large veins formed numerous anastomoses; membranes of brain congested; root of tongue had a yellow coating; pharynx exhibited a brownish-red, punctiform injection; œsophagus traversed with congested vessels; the whole surface of the lungs was marbled with cinnabar-red and brownish-red spots, which marbled appearance was also found throughout the whole substance of the lungs, except that the cut surface of the spots was *darker, yea, almost black*; a considerable quantity of *blackish fluid* flowed from their cut surface; the ventricles and auricles of the heart, and the large vessels quite filled with *dark* blood coagulated; liver congested, soft in some places, otherwise natural; stomach distended, *bluish* externally. (21.)

Case 25.—Dr. LOEWY poisoned another rabbit with three drachms of extract of Aconite.

Post-mortem.—Hind and fore legs drawn spasmodically to the body; the abdomen tympanitic; vascular injection of the internal surface of the skin; arbriform congestion of the pia-mater; substance of the brain and spinal marrow and its membranes natural; lungs much reddened, œdematous, filled with blood; their surfaces covered with numerous ecchymoses; the mucous membrane of the trachea much congested; the heart and large vessels filled with *very black* coagulated blood; liver large, filled with blood, soft, mellow, its surface and substance thickly covered with small red points; injection of the

veins of the smaller curvature of the stomach, its mucous membrane not reddened; the vessels of the peritonæum and mesentery crowded with blood. (21.)

Case 26.—Dr. LOEWY also poisoned a guinea-pig with about two tablespoonfuls of the tincture of Aconite, in divided doses. Death in four days.

Post-mortem.—Equiform redness of the abdominal peritonæum; arbriform redness of the peritonæal covering of the intestines, especially of the small bowels; punctiform redness of the surface and substance of the liver, the latter of which was mellow, fragile, friable, very much congested, and as if granulated; the surface of the lungs marked here and there with cinnabar-red spots, their edges œdematous, their substance pale reddish and aerated, with the exception of the lower lobes, which were darkened; tracheal mucous membrane somewhat redder; the coats of the stomach pale. (21.)

Case 27.—Dr. LOEWY also poisoned a large dog with four tablespoonfuls of the tincture. Death in ten hours.

Post-mortem.—Tracheal mucous membrane pale; the lungs of a chocolate brown color externally, and dark red internally, not at all œdematous; all of their lobes were filled with blood, not thick; both ventricles of the heart filled in part with *darkened* fluid blood, in part with coagula; the liver dark reddish-brown, dense and fragile; the bile of a light yellow color, and rich in albumen; œsophageal and gastric mucous membranes pale; the bowels slightly injected; bladder empty; brain natural. (21.)

Case 28.—A gentleman, aged fifty-eight, ate eight and a half roots of *Aconitum-napellus*, about the size of a small English walnut each, by mistake. In three quarters of an hour, he complained of burning and numbness of the lips, mouth and throat, which sensation soon extended to the stomach, followed by vomiting, first of his dinner, then of frothy mucus, but not of blood at any time; his limbs were cold, chest warm, head bathed in a cold sweat, eyes glaring, violent pain in head, excessive trembling, lips blue, mental faculties not disordered, he was neither delirious, nor sleepy, but quite conscious until within a few minutes of his death; neither had he cramps, spasm, or convulsions, the only approach to them was trembling; he frequently put his hand to his throat; though exceedingly weak, he did not lose his control over his limbs, for within a few minutes of his death he walked across the room with assistance; bowels not affected; breathing apparently natural; death in four hours, in a fainting state.

Case 29.—His wife ate half of a root and was affected in a similar way; she had the same burning and numbness of the lips, mouth, throat and stomach, also violent vomiting, curious sensation of numbness of the hands, arms and legs; she lost the power of articulating, so that her attempts to speak were followed by unintelligible sounds only; great muscular debility, she was unable to stand, and in this she differed from her husband who could both stand, and walk; stiffness and difficulty of moving her limbs; no cramps, spasms or convulsions,

the only approach thereto was stiffness of the muscles when she attempted to put them in action; although her eyes were wide open, her sight was dim and objects were seen indistinctly; her hearing was unaffected; the sensibility of her body was greatly impaired, so that her face and throat were almost insensible to touch; very giddy, but neither delirious nor sleepy; for the most part she was conscious, but at times scarcely knew what was passing around her; her body and limbs were cold; she was frequently pulling at her throat, but she knew not why. In five or six hours she began to recover, and natural warmth returned, *under the use of stimulants.* (3.)

Case 30.—A child, five years old, was similarly affected, but more slightly, except that it evinced a slight tendency to sleep, like the others; it was constantly pulling at its throat. (3.)

Case 31.—Experienced, sharp taste, vomiting of greenish substances, diarrhœa, restlessness, incoherence, lock-jaw, clenching of the hands. Death in three hours. The stomach was found of a slight reddish brown color. (8.)

Case 32.—A man who merely tasted a mess of greens in which the root of Aconite had been mixed, felt in the course of two minutes, a burning heat in mouth, throat, œsophagus and stomach; then a sensation of swelling of his face, and a general feeling of numbness and creeping in the skin; he had restlessness, dimness of vision and stupor, almost amounting to insensibility; in about an hour he was found speechless, frothing at the mouth and nose, hands and jaws clenched; occasionally he seemed to be dead, but revived. Vomiting, purging, tenderness of epigastrium, cramps, tingling of the flesh and a burning taste in the mouth followed. He did not recover until after the lapse of five weeks. (8.)

Antidotes.—Free vomiting with Mustard, Sulph., Zinc., or Ipecac.—Tartar-emetic is too depressing. Occasionally when the signs of congestion are very urgent, a small bleeding may be ventured upon, if the patient have average strength; repeated or copious bleedings are very hazardous. Opium and stimulants have been used with much success, especially when severe pains, distress, convulsions and great prostration were present. (11.)

As Aconite causes death by paralysing the brain and nervous systems, upon the integrity of which the functions of respiration and circulation depend, it is not improbable that *galvanism* might prove to be one of our most valuable means of saving life in cases of poisoning with this drug. If the susceptibility of the cerebral-spinal system could be kept up by this agency, until the effects of the poison could be expended, the functions of the organism might be sustained and life thus saved. (10.)

EXPERIMENTS UPON THE HEALTHY.

1. STARK reduced to a powder the *leaves and stalks* of the plant; a little of this powder put upon the tongue caused a degree of burning heat, which continued for some time, accompanied with transient and

pungent pains in the tongue; the powder left upon the tongue neither caused redness or inflammation; as long as the burning continued there was a very great flow of saliva.

A little of the powder applied to a fungous ulcer caused a slight suppuration, but no pain or burning heat.

The expressed juice was made into an extract; two grains were mixed with two drachms of white sugar, and ground for a long time in a marble mortar to the finest powder. Six, eight and ten grains of this powder produced no perceptible effects; twenty grains caused a more profuse perspiration than usual, which was so profuse that it extended to all his extremities; this continued the whole day. The same perspiration occurred every day he took the powder, and did not occur whenever he omitted it. Whence he concluded that Aconite promotes sweat, and was adapted to diseases in which the peccant matter might be expelled by the sudoriferous pores, or emunctories.

2. SCHNELLER experimented with the Alcoholic-extract of the Herb. Doses of from a half grain to four grains produced nothing but some griping and increased warmth in the abdomen. From five to ten grains caused aching pains in the forehead and occiput, especially towards noon; to which were added *increased warmth in the whole body*, some palpitation of the heart, a fuller pulse, and a certain mental uneasiness, which did not allow him to apply himself to any one subject long; seven and a half grains caused some scratching and burning in the throat, diminished appetite, and *yellow coated tongue*; from nine grain doses the conjunctiva of both eyes began to be greatly injected; ten grain doses caused distress in the abdomen and head in an increased degree, dryness of the throat, slight stitches in the sides of the chest, especially in the region of the heart and left hypochondrium; twenty-four and a half grains caused a violent drawing pain, increased by pressure, in the back and loins along the sacro-lumbalis and longissimus-dorsi muscles of both sides, so that every motion of the hips was prevented; after the lapse of five hours the pain left the back, and threw itself upon the antagonist muscles, viz., the recti-abdominis, which became tense and as hard as a board; at the end of eight hours, all had ceased except some tension of the abdomen.

From $26\frac{1}{2}$ grains he experienced vague stitches of pain in the left hypochondrium, back and head, tension in the loins, which lasted for three days, attended with increased warmth and redness of the face, great distraction, exaltation and happiness of mind, diminished powers of memory; his sleep was restless.

Remarks.—He concluded that it caused excitement of the vascular system, congestion to the head, slight trouble in the throat, and a powerful action upon the muscles and their sheaths, and the fibrous tissues in general. Lombard noticed the same excitation of the brain. It seems homœopathic to lumbago. The above extract must have been very weak and poor to produce such slight effects in such large

quantities; hence the system reacted easily against it and febrile reaction ensued. (11.)

3. Fleming says when a small piece of the root is chewed, it causes an increased flow of saliva, a peculiar numbness of the lips and tongue, with a tingling sensation, and a partial loss of the use of the lips; its topical application causes neither redness or swelling.

When the *saturated tincture of the root* is given internally, Fleming divides its action into four degrees.

First degree.—In a half an hour after a dose of five drops, warmth is felt in the stomach, accompanied by slight nausea and oppression of breathing, followed in about ten minutes, *by general warmth of the body*; numbness, tingling, and a sense of swelling of the lips and tongue; also tingling at the tips of the fingers, and a peculiar sensation at the roots of the teeth. These sensations last from one to three hours. Slight muscular weakness is generally experienced, with indisposition for exertion, either mental or bodily. In about a half an hour more, the pulse is found diminished in strength, and in another hour, both the pulse and respiration have become less frequent. Thus, a pulse, which, in the normal state, beats 72 per minute, will fall to 64, and the respirations from 18 to 15 or 16.

Second degree.—If ten drops be given at once, the symptoms supervene more rapidly and with greater severity; the tingling extends along the arms, and the sensibility of the skin is more or less impaired; in one and a half hours, the pulse may have fallen to 56, and become smaller and weaker, but still regular; the respirations about 13, and laboring; great muscular debility; giddiness and confusion of sight come on when the patient rises up. A lethargic state ensues, with great disinclination to be disturbed; coldness of the surface, especially of the extremities, which are cold to the touch.

This is the utmost extent to which the saturated Tinct. of the root can be given with safety and success.

Third degree.—On the administration of fifteen drops, or of three doses of five drops each, at intervals of two hours, *the feeling of warmth*, and the numbness and tingling again spread rapidly over the body, with diminished sensibility of the surface; *pains in the joints are complained of*; the dizziness and dimness of vision are complained of; the face becomes pale and anxious; the voice becomes weak, and there is often a dread of approaching death; the pulse occasionally falls to 40, or even 36, but more generally rises to 70 or 80 and becomes small, weak and irregular; respiration is short, hurried, and irregular, accompanied with deep sighing; skin moist and cold, and vomiting sometimes occurs.

Fourth degree.—From still larger doses the face becomes pale and sunken, froth issues from the mouth, and the prostration increases; sensations occur as if sinking from loss of blood; the pulse becomes smaller, weaker and irregular; cold, clammy sweats occur; consciousness usually remains, but the patient may become entirely blind,

deaf and speechless; the pupils which were contracted at first may become dilated; slight convulsions ensue, and with a few hurried gasps death by syncope ensues.

Aconite proves fatal, 1. by a powerfully sedative impression on the nervous system; 2, by suspension of respiration, or asphyxia; and 3. by syncope.

THEORETIC DEDUCTIONS.

According to Dr. Gerstel (a homœopathist) the *primary action* of Aconite consists:

1. Almost exclusively of an affection of the nervous system, especially of the vaso-motor portion of the great sympathetic nerve, with a simultaneous affection of a larger portion of that part of the spinal marrow which presides over sensation, viz., the posterior column, while the anterior, or motor column only becomes implicated by reflex action.

2. The peculiar character of the primitive action of Aconite is *paralyzing, or depressing*; from smaller doses and slighter degrees of its action, this paralyzing influence is marked by the occurrence of *crawling, prickling and creeping* sensations, accompanied with a sense of *numbness*, to which is added at a later period a feeling of swelling, especially in the skin of the arms, fingers, face, external chest, and legs.

3. Frequently the *depressing action* of the Aconite is confined to the sphere of the sympathetic nerve, and is marked by a confined and depressed state of mind, which seems to proceed from the region of the heart.

4. Then a feeling of chilliness, or creeping chills over the back, or proceeding from the back are experienced, and may gradually increase to an intense sense of coldness, with shaking chills, actual numbness and blueness of the parts most distant from the centre of the circulation, viz., the fingers and toes.

5. From a continuous and more powerful action of it, its paralyzing power will influence the vaso-motor apparatus in particular, marked by intermitting, weak and irregular action of the heart, emptiness of the left side of the heart, and great blood vessels, with corresponding alteration of the pulse, even down to complete pulselessness, with oppression of the chest, anxiety, restlessness, vertigo and swooning all proceeding from debility of the heart.

6. The simultaneous affection of the sympathetic and spinal nerves is marked by sensations of bruisedness, sluggishness, heaviness and lameness of the muscles, especially of the mouth, tongue, upper and still more of the lower limbs, and by entire loss of sensation, especially of the hands.

7. It is to be expected from this state of depression of the arteries and sensorial nerves, that all the se- and excretions which depend principally upon the arterial influence will be more or less interrupted; still the urinary secretion seems at times to form an exception, as it

may be increased in quantity, and then it is more watery, and spasmodic. It is very probable that similar alterations take place in the serous, fibrous and mucous membranes.

8. From extreme degrees of its action, viz., from more or less complete paralysis of the arteries, a very high state of venosity, or intense venous congestion ensues. The heart is then found to contain retained blood; the lungs are hyperæmic and overfilled with black, thinly fluid and venous blood, *without exhibiting the slightest trace of inflammation*; the sinuses of the membranes of the brain are crowded with *black* blood; hence the vertigo, staggering as if from intoxication, the bloating of the face, the involuntary sighing, the deep breathing, the *blueness* of the skin, of the face and lips, the icy coldness of the limbs, the venous abdominal plethora, the obstruction of the liver, the crowding of the blood with crude bilious substances, the dark yellow color of the skin, &c., until finally death ensues from complete obstruction of the circulation and respiration, owing to paralysis of the heart, pulmonary apoplexy and asphyxia.

SECONDARY, OR REACTIVE STAGE OF THE ACONITE-DISEASE.

In those cases where the primary action of the Aconite is not too powerful, the organism reacts at once against it, and nervous erethism, hyperæsthesia, and arterial reaction ensue; thus, the creeping, crawling and numb sensations give way to more or less painful piercing, rending, aching and pressing sensations; the sense of weariness, lassitude, lameness and powerlessness are supplied by trembling, jerking, partial or general convulsions; the coldness, faintness, weakness, irregularity and slowness of the pulse, are supplanted by arterial reaction, heat of the face, sensation of swelling of external parts, erethistic or synochal fever, the heart beats more powerfully, the pulse becomes quicker and fuller, and occasions congestion and irritation in all the secreting organs; in parts abundantly supplied with blood, as the bronchial mucous membrane, exsudation of blood, and inflammation may ensue.

GENERAL EFFECTS.

On the Nervous System.—*Nerves of Sensation.*—Aconite seems to exert a very decided and specific action upon the *nerves of sensation*, as evidenced by the peculiar feelings of tingling, prickling, numbness, creeping and crawling, &c., which it causes in so marked a degree, in almost every organ and part of the body. It is somewhat a matter of doubt whether it acts primarily and paralyzingly upon the nerves of sensation, or whether the *numbness, tingling, and loss of sensation*, which it produces in so eminent a degree arises from its depressing action upon those ganglionic, or vaso-motor, or great sympathetic nerves which follow the bloodvessels to their most minute ramifications and preside over their functions. My own impression is, that the pains caused and cured by Aconite are not purely nervous or neuralgic pains, but such as arise from some acrid, or rheumatic, or

other irritation of the ganglionic nerves about the blood-vessels, or else are congestive in their nature, or are owing to the return of the circulation and nervous energy to the blood-vessels and nerves of the afflicted parts, similar to what happens when the foot or leg is said to be asleep. Veith Meyer thinks that Aconite stimulates, or excites, or arouses the sensibility of the nerves of sensation, and assumes that the few symptoms that indicate an opposite condition are so insignificant, that they may be considered as the results of secondary action." But it is impossible to read a well described case of poisoning with Aconite or Aconitine, without becoming aware of the prominent and primary importance of the signs of paralysis of the circulation and nervous energies, or direct depression of the vital powers; thus, the most manifest symptoms are slight wandering delirium, the consciousness being partly retained; general muscular tremors, or very slight convulsions; failure of the circulation; a feeling of numbness and tingling over the entire body; coolness or coldness of the skin; loss of sight, and death by *exhaustion*, or *syncope*. If the above views be correct it cannot be a specific in cases of pure neuralgia, in which the nerve alone is affected. (11.)

In order to form a correct opinion respecting the operation of Aconite or of any other medicine upon the human system, it is important to bear in mind the fact that the circulation, respiration, and even sensation, are dependent upon the integrity of the cerebro-spinal system. Any depressing agent therefore, acting upon this portion of the organism, must of necessity impair more or less the functions of other organs which derive their vitality from this source. (10.)

Numerous autopsies of those who have died from the effects of Aconite, prove that no fatal lesions are produced in the lungs, the circulatory vessels, or the digestive apparatus, and yet among the first effects of the drug, are an alarming depression of the action of the heart and arteries, feeble and oppressed respiration, and a general failure of strength. (10.)

These phenomena must therefore be regarded as *secondary*, while the true seat of the toxical influence is the brain and nervous system.

Opium destroys life in a similar manner, by paralyzing the brain, and thus arresting the functions of the heart and lungs which derive their vitality from the former organ. (10.)

Nerves of Motion.—Aconite does not irritate the nerves of motion primarily like Nux-vomica, Angustura, Ignatia and Strychnine, but rather produces great muscular debility, which may, however, in the reactive stage, be followed by increased muscular energy, or irritation, and even convulsions. Still it is to be supposed that the convulsions caused by Aconite are similar to those which follow an excessive loss of blood, or the use of tobacco, Digitalis, Prussic-acid, &c.; still the convulsions in cases 2, 5, 6, 9, 14, 15, 16, 18, and 32 were so severe that they seem to have arisen from some powerful and direct irritation. (11.)

Muscular System.—If Aconite is homœopathic to any form of in-

flammation at all, it is so to *rheumatic inflammation*, inflammation of the muscular and fibrous systems, &c. LATHAM says: Acute rheumatism of the severest kind may have the start of us for full ten or fourteen days, during which nothing whatever has been done for its relief, and when at length the proper remedy has been applied, it has been cured as easily and rapidly as any one could promise himself that it would have been, if he had taken it in hand one or two weeks sooner; surely there is something remarkable enough to make us stop and think for a moment. An inflammation of the brain, the liver, or the lungs, would not thus wait our pleasure or our neglect, and be as curable ten or fourteen days hence, as it is to-day. For inflammation in these organs does not stand still in its first stage. It is progressive from stage to stage, and each succeeding stage carries it farther and farther away from the remedy. But, it is the very peculiarity of acute rheumatism that it *does*, in a certain sense, stand still, or rather does not get beyond the first stage. All its actions and movements are as forcible and rapid as possible, yet it does *not* get beyond the first stage. All its energy is expended upon one stage and there is no apparent progression beyond it. A fortnight ago there was great heat, and nervous and vascular excitement, and great pain and swelling of the joints, and to-day we have nothing more, and perhaps nothing less. There is no more sign of inflammatory exudation, or suppuration, or of parts disorganized, or parts destroyed now, than then. Verily, it seems as if the disease had wanted to be cured all the while.

In fact all the principal German writers on the *Materia Medica* place great stress upon the proclivity of Aconite to cause *rheumatic* symptoms; thus Vogt, Dierbach and Sobernheim agree that after the first tumult caused by taking large quantities of Aconite has passed off, that the head is apt to become very painful, and pains appear in the limbs, especially the so-called bone- and joint-pains, and persist until a more or less profuse sweat and increased flow of saturated urine set in. (11.)

Vascular System.—Heart and Arteries.—Pulse frequent, soft and weak, the beat being sometimes so feeble as to be almost imperceptible. Pulse 100, feeble and regular. Pulse feeble, 120 and intermitting after every second stroke. Pulse 90 and of fair strength. Heart's action almost imperceptible. Pulse small and 140. Pulse 40. Pulse often intermitting and feeble. Pulse scarcely perceptible. Sensation as if all the blood in his veins were frozen. Pulse scarcely to be felt, when it became more perceptible it was still intermitting and irregular, at times two or three beats followed each other quickly, and then were succeeded by an intermission. Pulse quick and irregular. Pulse slow and intermitting. Heart flabby and containing but little black fluid blood. Pulse so small and weak that it can scarcely be felt. Coldness and pulselessness of the limbs, and feeble beating of the heart, when the pulse became fuller it was only 58 and intermitted every fourth beat, gradually it rose to 70 and finally to 100,

the skin becoming hot and dry. Pulse irregular and slow; pulse 54, unequal and soft, as if the blood did not fill the arteries. Heart almost empty. No pulse to be felt in radial or temporal arteries, afterwards it rose to 125. Both venous and arterial blood very fluid. Some fluid and a great deal of coagulated blood in right side of heart; ventricles and auricles filled with black coagulated blood.

Aconite is most homœopathic in *acute inflammatory fevers* dependant upon a general derangement of the nervous system, or upon a retention of one or more of the excretions or secretions. In fevers arising from *local inflammations* it must be ranked as a remedy of secondary importance. In these cases we must seek for a drug which exercises a specific control over the local affection, as well as the febrile condition. (10.)

Teste asserts that, "if Aconite could be given in the very commencement before the disease has had time to develop a local inflammation, this localization might be prevented in many cases; but I believe likewise that when the local inflammation has already acquired a certain degree of intensity, many other drugs may, by virtue of constitutional idiosyncrasies, or with respect to the organ which has become the local focus of the disease, be preferable to Aconite, which, in such cases, could not be administered without involving a precious loss of time."

"As a general rule, it seems to me, that, even in acute inflammations, Aconite is only indicated when the inflammatory fever is the ruling symptom."

Clinical Remarks.—In disease of the heart, particularly in those in which the chief indication is to diminish the action of that organ, FLEMING found Aconite a most valuable remedy. In functional derangement it will often effect a cure. In simple hypertrophy, pain and increased action of the heart, it is preferable to Digitalis; its action is more purely sedative, more uniform, and less dangerous. But in a very large class of cases of disease of the heart, when obstruction exists, which prevents the heart from transmitting the necessary quantity of blood by the usual number of pulsations, and it is forced to make up for such inadequacy by more frequent and forcible contractions, the use of Aconite, Digitalis and similar remedies is highly injurious. (44.)

Venous System.—It is homœopathic to intense or excessive *venous congestion* of many organs, with entire paralysis, or depotentization of all the arterial activities, carried up to the point of absolute cyanosis. (11.)

If the vital forces of the patient are great enough to react against the Aconite, of course quite opposite symptoms will arise, viz., acute pains in various parts, and more or less active febrile excitement, which rarely, however, proceeds to the extent of causing true inflammation. When it does seem to cause inflammation it is not a pure, frank and decisive inflammation; even Dr. VEITH MEYER is obliged to admit that "we have as yet no irrefragable proofs, that this drug

can produce any thing farther than the *congestive* state ; there are as yet no instances, not even in cases of poisoning, nor in the later and most industrious provings of our Vienna colleagues, in which the introduction of it into the healthy organism has resulted in the appearance of any one of the products peculiar to inflammation, viz., an *exudation*." It may occasionally cause an *effusion*, but never a true inflammatory *exudation* of plastic lymph, fibrine or pus. "Even in the *post-mortem examinations* of those poisoned by Aconite, so far as now known, as well as in the experiments upon animals, no positive and decisive indications have been observed that any true *inflammatory product* has ever followed the administration of Aconite." Hence Aconite cannot cure a fully developed inflammation, but can only subdue that congestive state that precedes inflammation before a perfect inflammatory stasis and exudation have set in; in other words it can cut an inflammation short before it is fully developed, but it cannot cure it when it is ; this is confirmed at the bedside. In inflammation this remedy never fails to exert its beneficent and quieting power over the fever which accompanies the inflammation, and even over some of the inflammatory symptoms themselves, still, should the disease have gone a stage beyond the *stadium congestivum*, we often find ourselves obliged to abandon our Aconite, or at least only to rely upon it as a fellow-worker with other drugs more homœopathic to the existing disease." (11.)

PEREYRA (not Pereira) says, "we observe no genuine traces of inflammation in the bodies of those who have fallen victims to this poison—he insists that the mere circumstance of patches here and there of vascular fulness (which even NOACK and TRINKS admit is seated especially in the veins) along the alimentary canal does not prove that inflammation is present—for this appearance is observed in almost all cases where life is extinguished from the action of sedative agents"—and Opium it is well known causes flushed countenance, full pulse, but does not excite inflammation, but *venous congestion*.

VOGT says except the overfilling of the great vessels with (*venous*) blood we find but few traces of affection of the intestinal canal, in poisoning with Aconite, of the kind which the *Acria* cause.

And adds that violent poisoning with it is characterized especially by the excessive predominance of *venosity*, great congestion and accumulation of (*venous*) blood in the head, chest, liver and whole abdomen—it seems evident that if the veins be so full, the arteries must be comparatively empty.

The bilious symptoms which Aconite is apt to cause, also speak for its primary action upon the *venous* system. This is a great stumbling-block to those who assume that it acts primarily and excitingly upon the arterial system. VEITH MEYER says : "There is one morbid condition of the economy which in the present position of our science is not easily reconciled with what we (Veith Meyer) have laid down as the general sphere of activity of this drug ; I (V. M.)

have assumed that its field of operation is solely in the ganglionic nervous system, that it affects only the vaso-motor nerves which excite or sustain the arterial activity." Biliousness, jaundice and congestion of the liver are vastly differing affections from arterial congestion, true and arterial inflammation.

Look for a moment at the following symptoms of Aconite, and see if they do not present a perfect picture of—

Jaundice.—Dark-yellow skin. Yellowness of the sclerotica. Loss of appetite. Disgust for meat. Bitter taste in the mouth. Bitter taste in the mouth, with want of appetite. Pains in the chest and under the short ribs. Malaise after eating. Eructations with sourish taste. Vomiturition. Vomiting of green bile. Vomiting of a greenish, watery fluid. Vomiting of mucus. Pressing pain in the stomach, as if from a weight. Violent colic pains. Pressing pains, as from a weight in the hypochondria. Colic with inflation of the abdomen, relieved by the discharge of wind. Pressure in the hepatic region, by which the respiration is embarrassed (apparently from an increase of bulk in the organ), then aching in the umbilical region. Squeezing pain in the region of the gall bladder, when sitting, embarrassing the respiration. Flatulence. White evacuations. White evacuations and red urine. Thin, rather watery evacuations, with some colic, grumbling in the abdomen, and faint feeling. Constipation for several days. The urine passed in the early morning is brown, becomes cloudy after a time, and deposits a sediment. Nights in the highest degree restless, sleepless, and full of dreams. Fearful, vexatious dreams. Head confused and vacant in the morning after waking. Pain all over as if beaten. Unusual weariness. Constant itching and biting in different spots on the skin, obliging him to scratch. Slow pulse. Pulse unequally full, soft.

You will not easily find in any of the text-books on Pathology a clearer description of icterus than this detail of symptoms brings before you.

According to the assumption of the primary venous- and passive-congestive action of Aconite, we would expect exactly such effects upon the liver and biliary functions. It also seems homœopathic to abdominal dropsy from disease of the liver and omentum. (11.)

Lymphatic System.—STORCK and GREDING assume that Aconite does not act as prominently upon the glandular system as Conium, yet they both report cases of glandular swellings and tumors which resisted the action of Conium and yielded to that of Aconite. (See Frank's Magazine.)

LOCAL EFFECTS.

Mind.—In the majority of cases the mind remains clear and unaffected.

Sometimes there is great excitement with despondency, insupportable anxiety, howling, screaming, sobbing, complaining and reproaching. Shyness and hatred of every one. Excessive timidity, irrita

bility and moroseness. Acuteness of the imagination. Pondering, brooding, sorrow, grief, complaining and fearing sudden death or misfortune. Sensation as if thinking took place in the pit of the stomach (predominant action upon the solar plexus). Inability to bear the slightest noise. Alternating paroxysms of the most opposite states of mind, at times irritable, dejected, lachrymose, and passionate, then again joyous, full of smiling hopes, gay abandonment with singing and dancing. Unsteadiness of ideas; hurried accomplishment of a variety of things, and senseless running about the house. Confusion of mind. Repeated attempts to get out of bed. Short paroxysms of mania. Nocturnal raging delirium. Weakness of memory. Inconsolable anguish, fears and apprehensions accompanied with entire absence of courage, confidence, and energy of character, despair, loud moans, bitter complaints and reproaches. Great tendency to start as if in affright. (1.)

Clinical Remarks.—GRIESELICH thought that Aconite was indicated when there is excessive irritability of body or mind; in mental derangement when the vascular system is much involved; when there is frenzy attended with congestion or inflammation of the brain. Especially when there are paroxysms of great anxiety and mental depression. In hypochondria when the patient imagines that various wonderful transformations have taken place in his internal or external organs. (11.) RUCKERT advises it when there is anxiety and fear of approaching death; when the organ of caution is affected. LOMBARD thought it affected the brain somewhat like Opium. (See Page 135.)

Aconite is an efficient remedy against the intense mental anxiety and apprehension which accompany certain inflammatory fevers. This mental condition is very often present in yellow fever and constitutes one of its most troublesome symptoms. A few doses of Aconite, succeeded speedily by Arsenicum, usually affords prompt relief, and rescues the patient from danger. It is also the best remedy in feverish conditions accompanied by constant anxiety, restlessness, occasional delirium, and constant tossing about in bed, without being able to find a comfortable position, or to get a moment's sleep. (10.)

Teste commends Aconite in mental derangement of recent date, caused by fright, and in the delirium which precedes or accompanies certain *acute* fevers.

Head.—Confusion of the head, especially while in a warm room. Dizziness, when rising, bending or moving the body, as if from drunkenness, with staggering while walking, with absence of mind, darkness before the eyes, nausea and qualmsiness. Sensation as if the brain fell to and fro, from the slightest motion, and while reading or drinking. Feelings of heaviness, fulness and bursting feeling in the forehead. Unilateral drawing, throbbing and piercing pain in the forehead, with occasional severe shocks in the other temple. (Hemicrania.) Aching, piercing headache, with nausea (Sick-headache). Sensation as if a ball arose from the neighborhood of the navel, and

spread a cord around in the occiput and vertex (*globus hystericus*). Congestion of blood to the head, with redness of the face, or feeling of heat in the brain, with perspiration on the scalp, and paleness of the face. Heat, rushing and roaring in the head, as if from boiling water. Pains in the head increasing by motion, rising, speaking and drinking; relieved in the open air. (1.)

Fullness and oppressive weight in the forehead, with sensation as if the whole brain would start out at the forehead. Stinging and beating in the forehead and temples. (10.)

PATHOLOGY.—Vessels of the brain considerably injected; substance of the brain dotted with blackish points. When reaction comes on, the complexion, and the turgid state of the veins of the neck indicate congestion of the brain. *Venous* congestion of the brain. In three cases the membranes of the brain were injected and considerable subarachnoid effusion existed. General *venous* congestion. Ventricles of the brain filled with serum. (2.)

Clinical Remarks.—FLEMING used Aconite internally in fifteen cases of *headache*, with complete success in ten; of the successful cases three were nervous, four plethoric, and three rheumatic; of the unsuccessful cases three were nervous, and two dyspeptic. Relief was usually experienced after the first dose, and a complete cure effected on the first or second day. Drs. Burgess and Radley have seen Aconite of incalculable service in relieving the agonizing pain of nervous headache; Henderson and Miller have also used it with success. Storck and Vogel recommended it in rheumatic headache, and Copland has found it useful in both nervous and rheumatic cases. It is often more useful when applied externally, than when taken internally.

It is homœopathic to the most violent headaches when the patient lies as if unconscious, retches to vomit, thinks he must die, cannot endure the slightest noise or motion, and in which the face is pale and the pulse small and intermitting.

Also in *hemicrania* when there is a violent pain over the left eye, attended with nausea and vomiting.

In severe rheumatic headaches when attended with pains in the fibrous sheaths of the nerves, in the fibrous membranes of the brain and scalp.

In *venous* congestive headaches with excessive numbness and tingling in various parts.

It is *antipathic* to arterial congestive and inflammatory headaches and must then be given in full doses. (11.)

In *coma* and *apoplexy*; it is homœopathic to these disorders when they arise from venous congestion, or nervous exhaustion, and must then be given in very small doses; when they depend upon active arterial congestion the dose must be comparatively large. (11.)

In headaches proceeding from undue excitements of the brain and nerves, and accompanied by a rapid pulse—either full or feeble, and great uneasiness, restlessness, and discouragement, Aconite will ge-

nerally be found homœopathic. But is *not* an essential condition for the employment of Aconite, that there should be an exalted action of the heart and arteries; for it is often eminently curative in headaches occurring in persons whose circulation and animal heat are much below the natural standard. We have often cured rheumatic headaches in plethoric subjects with Aconite. In these instances it is not uncommon for the patient to complain of numbness and tingling of the extremities, and of the affected parts; and it is under such circumstances that this remedy acts with the most marked advantage. (10.)

Eyes.—Red inflamed eyes with great vascularity and insupportable pains, heat and burning in the eyes, with aching and rending pains (rheumatic) especially when moving them. Sensation and swelling of the eyes, with dryness and heaviness of the lids. Great lachrymation. Brilliant and very moveable, and prominent eyes, with spasmodic movements of them. Dilated pupils—very much contracted pupils; fixed look; intolerance of light; desire for light; mist and dark spots before the eyes; attack of sudden blindness; closing the eyes and drowsiness. Great photophobia. (1.) Eyes fixed. (50.) Painful ophthalmia, with profuse discharge of tears. (51.) Obscurity of sight, which becomes slowly established. (52.) Globe turned upwards, so that only the whites of the eyes can be seen. (53.)

FLEMING says, the pupil in general is more or less *contracted*, dilating to its natural size immediately on the cessation of respiration; it is owing to venous congestion.

Its sympathetic action on the retina is remarkable, when applied to one of the temples or one side of the forehead, more or less blindness of the same side is produced.

When the conjunctiva is slightly painted with Aconitine, *contraction* of the pupil speedily takes place and continues for several hours—PEREIRA has observed it to cause contraction of the pupil in some amaurotic cases of several years' standing, and where the iris underwent no change on exposure to strong light—when the ointment of the alkaloid, or the tincture of the root is applied to the temple or forehead the pupil occasionally becomes dilated.—Fleming has only witnessed this in two cases in both of which it was attended with partial blindness of the same eye; why such opposite effects should ensue in the two cases it is difficult to understand.

Giddiness with confusion of sight.

Headache, vertigo with dimness of vision.

Contraction of the pupil disappearing after the jugular vein is opened.

In four cases Fleming saw dilatation of the pupil accompanied by almost total blindness—either paralysis of retina, or of iris.

Aconitine applied to the eyeball of a rabbit—in three minutes the pupil began to contract; in five minutes it was scarcely one-sixth of the size of that of the other eye; when the contraction was extreme the pupil

was insensible to light ; but when only partial it still retained its mobility ; the contraction continued for nine hours.

Slight giddiness and dimness of vision are very common effects ; dull heavy pain in the eyeballs, dimness of vision and profuse secretion of tears, pain and watering of the eyes, without vascularity, black specks floating in the field of vision, dazzling and dimness of vision ; from ten drops of root, general trembling, violent headache, pain of eyeballs, constant lachrymation and intense photophobia, vascularity of conjunctiva not increased, eyes fixed and protruded ; pupils contracted.

NOACK advises it in ophthalmia of a catarrhal or rheumatic nature, especially when chemosis, or great redness and swelling around the cornea has taken place. Heat and burning in the eyes, especially the left ; great photophobia, inflammation and lachrymation of the eyes, with such severe pain that the patient wished to die ; swelling of inflamed eyes, redness of the conjunctiva and sclerotica. Inflammation from a foreign body in the eye, with redness, stinging pain and pressure in every part of the eye, intolerance of light and lachrymation. Dryness and heaviness of the upper eyelids. Painful, tense, red and hard swelling of the lids, especially in the morning. Sensation as if the whole eyeball were pushed into the orbit, prickling and smarting of the eyelids, as when a cold is setting in, soreness and itching of the eyelids, yellowness of the whites of the eyes, sparks and mist before the eyes, flashes and scintillations, lamps seem tremulous, and luminous vibrations before the eyes.

Clinical Remarks.—It is used internally and externally by German physicians in rheumatic and arthritic iritis and amaurosis ; also in simple rheumatic inflammations of the eye.

Ears. —Tingling and roaring in the ears. Tickling sensation and violent pain in the ears. Sensation as if something lay before the ears. Extreme sensitiveness to sounds, inability to endure the slightest noise. Roaring in the ears. (1.)

Clinical Remarks.—A very deaf old lady was almost cured of her deafness by an accidental over-dose of Aconite. In cases of severe ear-ache and inflammation of the ear, I have been in the habit of putting in a small quantity of a weak preparation of the root of Aconite. (11.)

An occasional effect of cold, is a ringing and obstruction of the ears, accompanied by slight febrile symptoms and a determination of blood to the head and face. Aconite is one of our most effective remedies in cases of this description. It is one of our best remedies in great sensitiveness of the ears to sounds and noises, occurring in persons of nervous temperament and feeble health. (10.)

Nose.—Sensation of stupefying compression at the root of the nose. Bleeding from the nose. Excessive sensitiveness of smell. Violent sneezing with pain in the abdomen and left side. (4.)

Clinical Remarks —It is a very useful remedy in the epistaxes of young and plethoric persons.

Face.—Blueness of the face ; dark circles around the eyes ; deathly paleness of the face when rising up ; sudden change of color ; great paleness of the face ; redness of one cheek and paleness of the other. Perspiration upon the forehead and face ; distortion of the face ; expression of anxiety and restlessness ; sensation of swelling of the face, with *prickling*. Burning, *prickling*, and piercing and rending pains (rheumatic and neuralgic) in the upper and lower jaws. Pain in the bones of the cheek as if they were ulcerated ; swelling of the lower jaw ; *prickling*, burning, quivering, coldness and deadness of the lips. In Aconite poisoning the face is apt to be remarkably pale, covered with a cold sweat, features altered or convulsed, with dark circles around the dull eyes. When reaction ensues, the face may become hot and flushed. (4.) Expression of astonishment or of stupidity. Hippocratic countenance. (1.)

Clinical Remarks.—It has been used successfully in many cases of *neuralgia* of the face ; thus it cured one case of tic-doloureux of eight years' standing in eight days ; one case, in both intra-maxillary nerves of nine years' standing, in six days ; one application of the tincture of root, externally, cured one case each of neuralgia supra- and infra-orbitalis ; one case of infra-orbital neuralgia of five years' standing was cured by the external use of Aconitine in fifteen days ; one case of supra-orbital neuralgia of four years' standing, by the internal use of the alkaloid in six days ; a nine months' infra-orbital neuralgia by external application of the tincture in nine days ; a seven months' neuralgia, infra-maxillary, by the tincture, in- and externally in thirteen days ; a two months' neuralgia frontalis by the external use of the tincture in three days ; a tic-doloureux of several years' standing, affecting the whole left side of face, was only temporarily relieved after each application of the tincture ; a neuralgia occipito-cervicalis of several months' duration was cured in four days ; another of several years' duration was only relieved for several hours after each application ; a hemicrania of three weeks' duration was cured in five days ; another of seven days' standing was cured by two applications ; and one of three days, by three applications.

In all cases of neuralgia it is said to be better to commence the treatment by external applications ; but if it be caused by inflammation either in the painful parts, or in the nerve farther up in its course, or should it be traceable to sympathetic irritation, the internal use of the remedy will probably have to be resorted to ; if the neuralgia arises from some local irritation of the nerve, or is merely functional, the local applications will probably be sufficient.

Case.—A surgeon, Mr. SPRY, had suffered greatly with very acute neuralgia of the mental branch of the fifth pair of nerves for eight years ; after exhausting almost every expedient that ever has been recommended for tic-doloureux, he was induced to make a trial of Aconitine, one grain to one drachm of cerate, a small portion to be applied twice a day ; in six days the pain was all gone ; each application caused a sense of numbness which continued for twelve or

eighteen hours ; six years afterwards, the cure remained permanent ; the pain has never recurred ; it used to be excited by gentle friction of the hand, or by a current of cold air, but now he could face any wind or temperature with impunity. Singularly enough no cases of cure are recorded in the homœopathic literature by Rückert. In the seventh case of poisoning there were such violent pains in the jaws that the patient held fast to them for fear they would fall off. (11.)

Quite recently we have had the satisfaction of affording prompt relief in two cases of inflammation and violent pain in the antrums by the internal use of Aconite. It has generally proved effectual in my hands against involuntary spasmodic twitchings of the muscles of the face and lips.

In erysipelatous inflammations of the face, accompanied by active febrile symptoms, Aconite in alternation with Belladonna or Rhus, is an indispensable remedy. In a few instances we have arrested the malady with Aconite alone. (10.)

Teeth and Jaws.—Piercing and throbbing pains in the teeth, with congestion to the head, burning in the face, and swelling in the upper and lower jaws ; penetrating pain in the jaws as if they would fall off. (2.) Pricking and burning followed by coldness and numbness of the gums. Spasmodic closure of the jaws. (1.)

Clinical Remarks.—Dr. FLEMING employed it in forty cases, by rubbing the gum with a few drops of the tincture of the root, or by introducing a bit of cotton with a drop or two of the tincture into the carious tooth. In seven of these cases it failed ; in six, it relieved only for a short time, and in the remaining twenty-seven it afforded complete and permanent relief. (44.) I have used Aconite in this way for seven or eight years, with almost invariable success. (11.)

Toothache from exposure to cold, or from the irritation of decayed teeth, is often cured by the internal use of Aconite. Spasmodic pains at the angles of the jaws are also speedily relieved by this remedy. (10.)

Mouth.—Dryness of the mouth and tongue ; moist tongue, with sensation of dryness in the mouth ; broad, white tongue ; coldness of the tongue ; *prickling, biting, burning and flecting* stitches in the tongue, with salivation ; numbness of the tip of the tongue ; paralysis of the tongue. *Prickling and burning* in the gums, palate, and root of the tongue, with trembling and coldness of these parts. Sensation of soreness about the ducts of the salivary glands as if they were ulcerated. Extreme heat in the mouth and throat. Sensation as if the tongue were swollen. (1.)

Clinical Remarks.—It is a valuable local application in painful affections of the tongue, especially in cancer ; it should never however, be applied to any open sore. (11.)

Several years ago we were consulted by an elderly gentleman who had been attacked one year before with a paralysis of one-half of his body. About six months subsequent to the attack, natural

sensation and entire power returned in all of the affected parts except the tongue and one side of his throat. Numbness, tingling, and partial loss of power on the parts, had continued up to the period of his consulting me. The thirtieth dilution of Aconite was prescribed every evening for one week, with decided improvement, which continued for four weeks, when the symptoms all disappeared. (10.)

Throat.—Scraping, *prickling*, piercing and burning in the throat, especially when swallowing; very intense burning pain in the throat; sensation of contraction back in the throat, as if produced by a strong astringent; acute feeling of heat in the throat and down the œsophagus. (4.) Sensation of burning in the throat, along the œsophagus, and in the stomach, with desire to vomit. Very acute pain in the back part of, the throat. (1.)

Clinical Remarks.—NOACK advises it only in *slight* catarrhal inflammation of the tonsils, palate and pharynx, but I have used the tincture of root successfully in the severest attacks of quincy, and found it more beneficial than Belladonna; it is especially indicated in rheumatism of the muscles of the throat, in which there is intense pain on swallowing, and but little redness or swelling of the mucous membrane. It has been used successfully in many cases of chronic pharyngitis. I often apply the tincture of the root externally to the neck with much benefit. (11.) Professor DUMAS depending upon the intimate sympathy between the throat and womb in women, and knowing the specific impression which Aconite makes upon the throat, was led to use it in uterine pains; when the throat became affected the uterus was relieved. (11.) Our experience with this medicine as a remedy for *tonsillitis*, coincides with that of Dr. Peters. In the early stages of the disease, when the patient complains of burning pains in the throat, which render deglutition almost impossible,—every attempt to swallow causing a spasmodic contraction of the muscles of the throat, we have found Aconite superior to any other remedy.

It is a remedy of great power in slight paralytic conditions of the throat. The indications for its employment are a partial loss of power over the muscles of the affected part, with slight numbness, and creeping, and tingling sensations in the integuments of the neck. The remedy is most homœopathic in these cases when there is a depression of the vital forces, indicated by a feeble pulse, pale face, cold extremities, and great nervous excitability.

We have also seen the remedy serviceable in inflammations and other affections of the throat, accompanied by intense febrile excitement; but in these instances the good effects have been due to the sedative and depressing action of the drug upon the cerebro-spinal system, rather than to any actual homœopathic or specific operation upon the affected parts. A careful examination of the pathogenesis of Aconite, will demonstrate the truth of our position. (10.)

Appetite.—Bitter, putrid, insipid, or fish-like taste in the mouth;

peppery taste in the mouth and throat ; bitter taste of all food and drinks, with the exception of water ; violent and unquenchable thirst ; desire for beer, which however, oppresses the stomach ; want of appetite and disgust for food. (4.)

Clinical Remarks.—It is homœopathic to want of appetite from excessive debility or a paralytic state of the digestive organs ; also to well-marked bilious derangement. (11.)

Stomach.—Hiccough ; empty eructations ; gulping up of a sweetish water, with nausea. Inclination to vomit as if from sickening, sweetish, or fatty food ; vomiting of green bile, and of mucus, or of bloody slime. Vomiting of blood and ascarides. Pain in the stomach from all food and drink. Feeling of distention, fulness, and aching in the stomach, attended with paroxysms of oppressed breathing. Sensation as if a cold stone lay in the stomach, occurring after repeated vomitings and stools. Feeling as if the stomach were puckered up. A reference to the cases of poisoning will show that Aconite is very apt to cause vomiting. Stomach containing viscid, green or blackish matters and bile. (4.) Tightness, pressure, fullness, and weight in the hypochondria. (1.) During the night, nausea, vomiting, and delirium. altered expression of the face, fixed look, and difficulty of hearing. Vomiting whenever liquids are taken. Vomiting, with great disposition to stupor. Vomiting, while the patient continues to faint occasionally. Vomiting and purging accompanied by cardialgia and violent colic pains. (15.)

PATHOLOGY.—In some cases the stomach is found red and inflamed ; in other cases the mucous membrane is irregularly reddened in several places, especially at its fundus and greater curvature ; or traces of considerable congestion of a brownish color. But in a great many cases the stomach is found pale and not all congested or inflamed. Stomach much distended with gas, and containing a quantity of ash-colored, and viscid fluid. (2.)

Clinical Remarks.—NOACK advises it in the vomitings of pregnant, or hysteric females ; when there is vomiting of blood, or worms ; in cramps and inflammation of the stomach. I have found the external application of the tincture of the root very useful in many painful and inflammatory affections of the stomach. (11.)

Abdomen.—Aching pain in the hypochondria ; drawing pains in the abdomen ; compressing, griping and burning pain in the region of the navel ; insupportable griping pains ; swelling and distention of the abdomen ; painful sensitiveness of the abdomen to touch and motion. Wind colic, especially at night, and attended with distention and rumbling in the bowels. (4.)

PATHOLOGY.—Great *venous* congestion of the abdomen. Blood vessels, especially the veins of the abdomen, remarkably distended with blood ; *omentum very much inflamed, and a great deal of serum in the cavity of the abdomen.* Duodenum and small bowels containing a considerable quantity of viscid greenish matters, or bile ; red spots

in various places on the intestines. Redness of the bowels, and veins of the abdomen overfilled with blood. Vessels of the mesentery and peritonæum crowded with blood. Equiform redness of the abdominal peritonæum; arbriform redness of the peritoneal surface of the intestines, especially of the small bowels. Bowels slightly injected.(2.)

Clinical Remarks.—NOACK recommends it in diaphragmatis; in *peritonitis*, even the puerperal variety; in colic from taking cold; *enteritis*, inflammations of both the large and small bowels, when attended with piercing, cutting, burning and rending pains, with extreme sensitiveness of the abdomen to touch; it is said to have proven useful even when fæcal vomiting, great anxiety and coldness of the legs have set in. In strangulated hernia. I have been in the habit of depending upon a lavish external use of the tincture of the root, in all the above affections; the relief in puerperal peritonitis is extraordinary; I have almost ceased to regard peritonitis and enteritis as formidable affections, provided Aconite can be applied externally, both early and abundantly enough. (11.) In puerperal peritonitis, Aconite either alone or in alternation with Belladonna, will prove successful in a large majority of cases. This disease is characterized by a high degree of nervous excitability, and a general condition of the system which points strongly to these two polycrests. We have employed this remedy successfully in one case of neuralgia of the intestines, in a young lady, twenty years of age, who had become much debilitated by too frequent and too profuse menstruation. The paroxysms occurred at irregular intervals, and were accompanied with great anxiety and restlessness, coldness of the extremities, pale face, rapid and feeble pulse, and sensation of numbness alternating with acute pains in the bowels. (10.)

Liver and Spleen.—Burning, piercing and stabbing pains in the region of the liver, with oppression of the breath. Sensitiveness of the liver-region to touch. Jaundice.(4.) Fullness and tension in the hypochondriac region, which is painful and hard to the touch.(1.)

PATHOLOGY.—In case nine, fully developed jaundice was caused by Aconite. But little watery yellowish bile in gall-bladder; spleen lax and softened. Liver blackish red, and gall-bladder distended with bile; spleen somewhat paler than the liver, and its surface wrinkled. Liver large and covered with dark red spots. Liver congested and soft in some places. Liver large, filled with blood, soft, mellow, and its surface and substance thickly studded with small red points. Punctiform redness of the surface and substance of the liver, which is mellow, fragile, friable, very much congested, and *as if granulated*. Liver dark reddish brown, dense but brittle; the bile of a light yellow color and rich in albumen. (2.)(3.)

Clinical Remarks.—Aconite certainly seems to exert a very powerful action over the liver; it is homœopathic to venous congestion of the liver, and general plethora abdominalis; to *ascites* from disease of the liver, even from granulated liver; also to fully-

developed jaundice. The external use of the tincture should not be forgotten. Professor FOUQUIER has used it with some success as a diuretic in passive dropsies. Dr. CANDOLLE says, it is a domestic remedy among the Alp-people in dropsy. (11.)

In cases of hepatitis, acute and chronic, accompanied by great despondency, nervousness, and very dry skin, and a consequent retention in the blood of effete matters which should be thrown off by the cutaneous, urinary, and other excretions, a few doses of Aconite always render good service. If it does not effect cures in these instances, it uniformly places the system in a better condition to be acted on by other remedies. (10.)

Stools and Rectum.—Constipation; hard stools; *white* and scanty stools, with tenesmus; diarrhœa; *white* stools and red urine. Transient paralysis of the sphincter and involuntary stools. Nausea and perspiration before and after the attacks of diarrhœa. Diarrhœa, with profuse flow of urine, and colic. (4.) Dark and very fetid stools. (1.)

Clinical Remarks.—*In dysentery.* MARBOT, surgeon major of the Crocodile man-of-war treated three hundred cases of inflammatory dysentery with Aconite; there was intense fever, hard, contracted, rapid pulse; violent headache; a dry and bitter mouth, although the tongue was flattened and not much loaded; tenderness of the abdomen, colic, distressing pulsation in the right hypochondrium, and tenesmus; the effects of the Aconite quite surpassed his expectations, for the inflammatory symptoms subsided in less than a day, and the blood disappeared from the stools in a few hours; he always found it to abate the hæmorrhage and lessen the fever, the pain in the belly too becoming relieved, and the stools passing easier, even a few hours after the first dose. But the Aconite exerted no other effects upon the stools than removing the blood from them, their mucous and glairy characters continuing as before, and even their number not undergoing a diminution proportionate to the improvement of the other symptoms; it would seem to exert a very feeble action on the intestinal contractions, but promptly subdues the febrile action and the excitement produced in the various organs. Aconite does not cure the dysentery, but so modifies its nature as to render it amenable to treatment that proved useless before. After Aconite, Ipecac. came in play; Mercury was given when the liver and pancreas were disordered, the stools being green, opaque, or foamy and muco-purulent. Opiates were only useful after the above remedies had produced their effects and the inflammatory action had subsided. He did not lose one case out of three hundred. It renders the evacuations in inflammatory dysentery and diarrhœa less irritating and removes the fever.

Urinary Organs.—Retention of urine with pressure on the bladder, and stitches of pain in the kidneys; dysuria; anxious urging to urinate; profuse flow of urine, with great perspiration, diarrhœa and colic. Urging to urinate, produced by pressing on the abdomen. Transient paralysis of the neck of the bladder and involuntary uri-

nation, Burning and pinching in the neck of the bladder. Brown and hot burning urine, depositing a brick-dust sediment. Frequent discharges of urine, which deposit blood after standing awhile. (4.) Diminished flow of urine with an increase of its solid parts. (1.)

Clinical Remarks.—Diminished secretion of urine, with an increase of its solids, is a *primary* effect of Aconite, while a profuse flow, with a normal amount of solids, must be regarded as a *secondary* effect of the drug. It is evident therefore, that Aconite is most homœopathic, in inflammatory affections accompanied by scanty, and high colored, or white urine, with an excess of solids (except chloride of sodium), and more or less irritation of the urinary passages, in consequence of the acrid condition of the secretion. (10.)

Genital Organs.—1) *Male.* Increased sexual desire, quickly alternating with the opposite state. Itching of the foreskin; pricking and squeezing pain in the glans while urinating; creeping and crawling sensations in the genitals. Bruised pain in the testicles.

2) *Female.* Menses last too long; hæmorrhage from the womb; itching of the vulva; delirium at the monthly period. Profuse, tough, yellowish leucorrhœa. Increase of milk in the breasts. (4.) Reappearance of menses, which had been suppressed by exposure to cold, but succeeded by a white and very fetid discharge, which continued four days. Reappearance of menses which had been arrested by a cold bath. (1.)

Clinical Remarks.—Suppression of the menses occurring in females of a robust and sanguine temperament, from exposure to cold, or from violent emotions, may usually be promptly restored by a few doses of Aconite. The cause of derangement in these instances, has produced an impression upon the entire organism, impairing the functions and checking the secretions of nearly every organ. The specific action exercised by Aconite upon the system, tends directly to restore these impaired functions. (10.)

Air Passages.—Attacks of catarrh of the head. Hoarseness early in the morning; sensation of numbness in the trachea; attacks of paralysis of the epiglottis, and paroxysms of choking while swallowing. Great sensitiveness of the larynx. Anxiety, with danger of choking. Cough from tickling, high up in the larynx. Cough after drinking and smoking. Dry short cough. Incessant cough from tickling in the larynx. Coughing up of blood. Inability to articulate, so that attempts to speak are followed by unintelligible sounds only. (4.)

PATHOLOGY.—Mucous membrane of trachea much congested; some redness of trachea, although at times it is found pale. (3.)

Clinical Remarks.—In simple inflammatory, catarrhal and spasmodic croup, I have been in the habit of relying almost exclusively upon tinct. Acon. root and Tartar-emetic, in alternation; and I may say, always with success, and that right promptly. It is a great waste of time however to use these remedies in true membranous croup; Bromine, Ammon.-caust., Iod., Merc. or Bichrom.-pot. are there re-

quired. (11.) In most cases of simple non-membranous croup, a great number of medicines may be employed with entire success. We have often seen such attacks yield promptly to single remedies like Ipec., Spong., Bryon., Tart.-emet., Hepar-Sulph., Aconite, and Phosphorus; but when the croupy symptoms are accompanied by febrile symptoms, Aconite can scarcely be dispensed with, either alone or in alternation with some other remedy.

Aconite occasionally proves serviceable in aphonia arising from a paralytic condition of the vocal chords and other parts concerned in articulation. Also in those cases of extreme sensitiveness of the larynx, accompanying chronic ulcerations of the throat and wind-pipe. It is likewise an excellent remedy in slightly paralytic states of the muscles of the neck and throat, which now and then remain after attacks of paralysis. In these cases we are in the habit of employing the high dilutions. (10.)

Lungs and Pleura.—Offensive breath; noisy loud respiration; short breathing while asleep; oppression of the chest with heavy and loud breathing; high respiration. Slow breathing and slow pulse. Gradual cessation of respiration and circulation. Great oppression, heaviness and compressing oppression of the chest. Painful stitches in the chest, especially when breathing, coughing and moving; dull stitches; single heavy stitches of pain through the chest, from before backwards; stitches in the sides, with complaining and weeping mood, anxiety and irritability. Prickling pain in the chest. Soreness of the chest on percussion. Mucous rattle in the posterior portions of the lungs. Respiration irregular and spasmodic; breathing stertorous, or short and almost imperceptible; mucous rattle heard at a distance. (4.) Frequent respirations (24 in a minute) with anxiety. Short and imperfect respirations with feeble pulsation of the heart. (1.)

PATHOLOGY.—Lungs heavy, blueish, and of a violet color posteriorly; they crepitated but little and were filled with venous blood (venous congestion). Lungs, especially the lower lobes, filled with black, venous blood. Lungs pale, red, soft and completely collapsed. Lungs dense, brownish, filled with blood and less crepitating than usual. Lungs rose-red and crepitating. Surface of lungs covered with dark-red spots which extended into its substance, the cut surface of which effused a reddish brown and viscid fluid, resembling the rusty expectoration of pneumonia, or hæmorrhagic œdema of the lungs. Whole surface of the lungs was marbled with cinnabar-red, and brownish-red spots; this marbled appearance was also found throughout the whole substance of the lungs, except that the cut surface was *darker*, almost *black*; a considerable quantity of *blackish* fluid flowed from the cut surface of the lungs, (*venous congestion*). Lungs much reddened, œdematous, filled with blood, and their surfaces covered with numerous ecchymosis. Surface of the lungs marked with red spots, their edges œdematous, substance pale reddish and aerated, with the exception of the lower lobes which were

dark. Lungs of a chocolate-brown color externally, and dark-red internally, not at all œdematous; all their lobes filled with not very thick blood. We observe very few, or no genuine traces of inflammation from Aconite; the presence of patches here and there of vascular fulness, especially in the veins does not prove that inflammation is present. (2.) (3.) (4.)

Clinical Remarks.—BORDA recommends it in pneumonia after the first violence of the inflammation is broken, and spasmodic cough, suspicious expectoration, great irritability of the lungs, and an erethistic state remains. Busch and Beaumes advise it in pulmonary consumption during the erethistic inflammatory stage, with flying stitches of pain in the chest, and feverishness; also when the tubercles are softening and the sputa are fetid and of bad character. Kindervater of Hanover has depended upon it for twenty years in the cure of all acute internal rheumatic inflammations, i. e., all such as are caused by taking cold, such as rheumatic-pleurisy, pneumonia, bronchitis, peritonitis, acute arthritis, &c. The above are all allopathic authorities; another, Dr. Routh, (see London Lancet, Aug. 1855), says, the first indication in pneumonia is to diminish the general fever and the increased pulmonary respiration; these can be effected by the tincture of the root of Aconite, on the action of which in small and repeated doses he dwells at length, and especially in reference to its certainty of action and utility as compared with the ordinary tincture. (11.)

It is highly probable, as we have already observed, that many of the pulmonary symptoms produced by Aconite, are due to its specific action upon the brain, rather than to any direct impression upon the lungs. Normal respiration and circulation can only be sustained by an unimpaired condition of the brain. Even when the impression upon this organ is slight, we observe an immediate change in the action of the heart and lungs. The inhalation of chloroform or ether for example, which exercises a specific influence upon the brain, causes an almost immediate acceleration of respiration and circulation—the pulse often rising to 140, and the respirations to 26 or more in the minute.

Entertaining these views with regard to the *modus medendi* of Aconite we have been in the habit of prescribing it to allay nervous and arterial excitement so often present in inflammatory affections of the pulmonary tissues, but not as a specific remedy against the actual seat of the inflammation. In pneumonia as well as many other inflammatory diseases, its general sedative action upon the cerebro-spinal system, the circulation, and respiration, render it an important intercurrent remedy; but it cannot be regarded as strictly homœopathic in these cases. (10.)

Back.—Weakness of the neck. Rheumatic pain in the neck, only felt on motion. Pain in the loins (lumbago). Cutting pains extending from the spine around into the abdomen (spinal irritation). Painful boring in the left kidney-region. Violent, piercing, rooting pain extending down the whole of the left side of the spine, aggravated at each

inspiration. Bruised pain in the whole spine, especially in the sacrum and lumbar vertebræ, and attended with pain in the bowels, (spinal irritation). Painful prickling and crawling in the spine, as if from beetles. (4.)

Clinical Remarks.—In *Lumbago*, Fleming used Aconite in ten cases; and in each a complete cure was effected; it was used internally and externally, and relief was felt speedily in every case. (44.) It seems homœopathic to spinal irritation. (11.)

Upper Extremities.—Bruised pain, and acutely painful *swelling* of the shoulder. Tearing pains in the shoulder, extending down the arm into the wrist and fingers, with blueness of the hands. Trembling of the arms and hands. Piercing pain in the arm and forearm. Feeling of heaviness in the forearms, extending from the elbow down into the fingers. Drawing, rending pains in the right forearm. Compressing pain in the left arm. Paralysis of the left arm. Falling asleep and prickling in the fingers. Icy coldness, loss of feeling, and numbness of the hands. Compressing pain in the hands. Cold sweat in the palms of the hands. (4.) (9.)

Clinical Remarks.—It is homœopathic to acute rheumatism of the large joints; to neuralgia and rheumatic neuralgia of the arms; to paralysis of sensation of the arms. (11.) In severe neuralgic pains of the arms the external use of the tincture of the root often affords prompt and permanent relief. Taken internally, at a high dilution, it usually removes the morbid sensitiveness of the arms which sometimes remains after paralytic attacks. Also after paralysis, when a tingling and creeping sensation remains, a high dilution of this medicine is quite homœopathic. (10.)

Lower Extremities.—Bruised and crushed pains in the hip-joints, especially after sleeping and lying down. Staggering while walking from weakness and pain in the hip-joint. Drawing pain and paralytic weakness in the legs. Weakness and unsteadiness of the knees. Slipping of the knees while walking. Piercing, jerking rending in the knees. Pain in the ankle-joints, with despair and fear of death. Heaviness of the feet. Numbness and falling asleep of the feet. Coldness of the feet and toes, with sweat between the toes and on the soles of the feet. (4.) The lower limbs constantly in motion. (1.)

Aconite-rheumatism.

VOGT says after great restlessness Aconite causes relaxation, diminution of heart- and pulse-beats, head becomes confused, often very painful, the face more puffed-up and livid, *pains set in in the limbs, especially so-called bone-pains*, and *pains in the joints*, until under profusely out-breaking sweat and increased flow of urine, the symptoms generally disappear.

(It seems not only to produce the pains, but also the crises by sweat and urine of rheumatism.)

J. A. SCHMIDT has advanced the conjecture that it acts prominently upon the *fibrous-tissues*, external skin and pulmonary mucous membrane—far less upon the lymphatic system and glands—VOGT thinks this notion is not far from the truth, if we call to mind *the pains in the bones and joints*, the sweat, itching and springing up of vesicles (like rheumatic-miliaria?); in further corroboration he adds that the observations of the best practitioners have found it most serviceable *in diseases of the fibrous tissues*, and even Stork admits that it is far less serviceable in glandular affections than Conium, although it is a much more acrid and energetic drug than Conium.

SOBERNHEIM says *it causes painful sensations in the joints and bones*, which disappear after the breaking out of a profuse sweat and abundant secretion of urine, and adds that it differs from Conium by *its more prominent action on the fibrous system* and external skin, whence arise the *bone- and joint-pains*.

HARNISCH says it causes *pain, fullness* and trembling of the limbs, especially of the lower extremities, and the patient at the same time *often suffers from the most violent pains in the bones and joints*.

KÜTTNER says *general painfulness of all the joints not unfrequently arises after large doses of Aconite*.

HARNISCH adds that the skin eruptions, profuse sweats, also *the pains in the joints, limbs and bones*, all prove the peculiar action of Aconite upon the skin and *fibrous tissues*, which is to increase the activities of them.

HARNISCH thinks it is to be doubted whether the good effects of Aconite against rheumatic and gouty joint-, limb-, and bone-pains depends upon its homœopathic power (which it certainly possesses) of causing similar effects in the healthy; *the violent pains which it causes in the bones, limbs and joints*, prove the peculiar action of it upon these parts, and depend partly upon an inflammatory-like irritation, and in part upon a purely nervous affection, hence, he says, if this remedy cures these complaints according to the homœopathic law, it should also, as it quickens the pulse and circulation and causes febrile symptoms, cure acute rheumatism and febrile gout.

Clinical Remarks.—There is a vast quantity of old school testimony to the efficacy of Aconite in rheumatism and similar affections.

NOACK and TRINKS say it is used in the old school practice

in rheumatic spasmodic asthma,

“ arthritic affections of chest,

“ lumbago and ischias,

“ stiffness of limbs (rheumatic),

“ rheumatic swellings,

“ “ “ of periosteum,

“ “ “ bones,

“ local bone-pains,

“ mercurial disease in the form of rheumatism,

“ rheumatism,

“ “ wandering,

in rheumatism of the joints,
"gout, nodous-gout, and gout with paralysis,
"violent pains in the limbs,
"rheumatic metastases to internal parts.

In Germany it is regarded as the main remedy against chronic rheumatism.

Of fourteen recipes for Aconite in Sobernheim's *Materia Medica*, eleven are for rheumatism.

SOBERNHEIM says it is the main remedy in rheumatic and gouty affections, partly chronic and inveterate, attended with abnormal metamorphoses, partly fixed and very painful, and occurring in the form of joint-rheumatism and joint-gout; he thinks it allays the pains by actively exciting the suppressed perspiration and causing profuse diaphoresis. Gräfe, Schmidt, Rust, Lombard, Kopp, Brera, G. A. Richter, Stark, Hufeland, Stork, Barthéz, Scudamore, Vering, &c., all join in recommending it.

VOGEL advises it in atonic gout and in the head-gout which occurs in the form of hemicrania, with predominant affection of the *fibrous dura mater*.

GRETING recommends it in affections of the heart and chest from rheumatic and arthritic causes.

Kahleis, Davies and Lombard in rheumatism of the heart and affections of the fibrous portion of the pericardium.

VOGT says in many instances pretty rapid relief from pain has been caused by it, but most of such cases seem to have been of rheumatic or arthritic origin and ceased when Aconite-perspiration set in.

HARNISCH says it cures chronic-rheumatic and arthritic inflammations of the stomach and bowels.

STORK cured the most violent rheumatic pains which did not allow of the use of the arms and legs.

THILENIUS says it relieves nocturnal syphilitic bone-pains far better than Opium.

STORCK thought that the syphilitic acridities which attacked the nerves and bones and caused the pains were solved by the Aconite, brought into the general circulation and then cast out by the profuse sweats and urinations which ensue under the use of it.

The Alcoholic-extract of Aconite according to Lombard, possesses a specific curative power against acute joint-rheumatism, he says it quickly relieves the pains, and rapidly promotes the absorption of the effused synovial fluid from the affected joint; he used it exclusively for two years in the Hospital at Geneva.

KOPP advises it in rheumatic pains with syphilitic basis.

BRERA in nocturnal syphilitic bone-pains.

PEREIRA says as a topical remedy it is most valuable for the relief of neuralgic and rheumatic pains; in rheumatic pains unaccompanied with local swelling or redness, it is frequently of great service; in painful conditions of the intercostal and other respiratory muscles occurring in rheumatic individuals, PEREIRA has found this remedy most valuable.

In acute rheumatism it has not proved successful in his hands, but he has been informed of cases occurring to others in which it has been of great service, he adds, in rheumatism it has frequently proved serviceable when combined with a sudorific regimen; says he has seen it give great relief to rheumatic pains.

In rheumatic hypertrophy of the heart it has been recommended by Lombard of Geneva, on account of its decidedly sedative effects upon the heart.

PEREIRA says the application of the tincture as an embrocation in neuralgia and rheumatism it is *invaluable*, adds further: Of the great efficacy of *Aconitina* in neuralgic and rheumatic affections no one can entertain a doubt, who has submitted the remedy to a trial.

VOGT says it is among those remedies which only cure after a protracted use; it is praised with justice in old and atonic dyscrasias, viz., rheumatic, arthritic, psoric, and degenerate syphilitic.

Especially when these affections have attacked the periosteum, articular-apparatus, the muscular and tendinous sheaths; have lasted for a long time, and are deeply seated.

Says it is used in acute and chronic rheumatism and chronic gout. In acute joint-rheumatism says Aconite is now admitted to be one of the most efficient remedies, which most quickly relieves the pains, and even aids much in facilitating the absorption of the effusions about and in the joints, and lessens the inflammation, especially when combined with *Colchicum*. Not less great is its curative influence in chronic rheumatism, even in those forms which are increased to the highest grade of neuralgia, viz., in prosopalgia and ischias, in which Roche, Thealier and others have praised it as almost specific.

Also in diseases of the fibrous tissues and bones, viz., in tophi, dolores osteocopi, &c., when dependant upon venereal, arthritic, rheumatic or degenerate scrofulous dyscrasia, it according to the most experienced practitioners, effects more than any other narcotico-acrid remedy.

Lombard on Aconite in Rheumatism.

1st Case.—Of fifteen days' duration, was sensibly relieved in twenty-four hours, and cured in three days; doses one-half gr. extract, three times a day; on first night, effect of medicine was very marked, patient slept better than before, motions of arm more easy, pain less intense.

Next day pains much less, and movements of arm almost unconstrained.

2d Case.—Rheumatism of shoulder-joint of three weeks' duration, was removed in forty-eight hours, first day two grs. four times a day, second day two grs. every two hours, there was no great diminution of pain, but motions were more easy.

3d day. Pain diminished three-fourths, and movements of arm were so little constrained that patient could use it to dress herself, the pains at first produced by moving the arm were of such intensity as

to draw cries from the patient, yet in forty-eight hours they were completely removed.

3d Case.—Sick six days, first ancle-joints, two days after both knees tumefied and hips also, pains appeared to occupy particularly the ligaments in the fibrous parts, which were painful under pressure.

A half gr. five or six times a day, in forty-eight hours relief very marked, pulse fell from 100 to 80, pains had left ancles, knees and hips and attacked the great toes, which were enlarged and tumefied.

Next day.—Toes easier, hips still a little painful.

5th day of treatment.—Left wrist was attacked, became red and tender, as also several joints of hand.

Dose.—Six grs. in twenty-four hours.

On the 8th day cure was complete; febrile condition and general symptoms were dissipated in forty-eight hours. Aconite did not allow the pains and swelling to occupy any one joint more than two days.

4th Case.—Came under Aconite treatment on the seventh day of the disease; pulse 90, skin hot, left knee swelled, hot and painful.

Dose.—One-half gr. every two hours.

After first night she slept, which she had not done for eight days and nights.

Pains much diminished, hips easy, knees still painful.

Dose.—One and a half gr. every two hours.

Next day, pains all disappeared, legs were so free that she could stand for some seconds. Copious sweats occurred every night.

On the next day her shoulder, elbow, wrist and left hand were the seat of acute pains and distinct swelling.

Dose.—Three grs. every two hours.

Next day, shoulder and elbow free, wrist remained the same, joints of hand almost free, except thumb.

Dose.—Three grs. every one and a half hour.

Next day all the joints were free. She sweated abundantly during the night, and her convalescence was complete. A very severe relapse from walking two hours with scanty clothing was cured in five days.

As in other cases, the pains ceased in a few hours, and she was well in eight days.

Aconite caused some excitement and dreaming, but the principal effect was an abundant and almost constant sweating, in this case only, as all the other cases were cured without diaphoresis.

The large joints are cured much more quickly than the smaller.

5th Case.—Had already lasted six weeks; successively attacked loins, shoulder and right knee; latter only three days ago; it was enlarged with evident fluctuation, the least motion gave acute pain, pulse 96 to 100, abundant perspiration, tongue white.

Dose.—One-half gr. three times a day, then six, eight and ten times; on third day, fever and sweating completely gone, pains in knee much less, swelling less.

Dose.—Six and seven grs. a day.

On the 6th day, the pains were all gone, knee much less in size; patient could walk, but the gait was constrained by synovial effusion, which was not all absorbed.

On the second day, pains and fever had disappeared and appetite returned.

In less than a week the effusion which had existed in the knee, was less by three-fourths, so that the patient who could not move in bed without great suffering, now walked freely.

While in the preceding case sweats appeared to be the result of the use of Aconite, in this case they ceased after two days' treatment, and appeared no more.

6th Case. —The first, one gr. dose caused nausea and vomiting, also second, but not afterwards.

It also caused dizziness, dimness of sight, a great vivacity of impressions which the patient compared to the magic lantern, which appeared to her as soon as she closed her eyes, also caused *stiffness* of diseased arm, dizziness, fanciful visions, sudden flushes of the face, and a great liveliness of impressions, *almost always accompanied with gay and pleasing thoughts*, (LIKE OPIUM.)

From the first day, the pains were much diminished, and each time the dose was increased, the pains were calmed in proportion, latter effect was so decided, that when patient had taken three grs. every two hours, she appeared as if under the influence of a narcotic.

Finally, the large articulations, such as wrist, elbow, and shoulder, *were more promptly cured than those of the fingers*, although the latter were first affected, perhaps hence were more fixed.

The œdema followed the course of the pains i. e., *disappeared from around the large joints more rapidly than from the smaller.*

LOMBARD thinks Aconite possesses a specific virtue for the dispersion of rheumatic inflammations *seated in the joints*.

Does not appear to destroy the principle of rheumatism, for it attacks other joints while patient is using it, hence without exerting a preservative action, it cures rheumatism by neutralizing its morbid influence wherever it tends to fix itself.

Patients have declared that they have found a diminution of pain in the space of an hour, but usually the sedative effect was only evident at the end of several hours.

The antiphlogistic action which arrests the inflammation and tumefaction, whether internal or external to the joint, is commonly more slow, twelve to twenty-four hours is the most common period for this amelioration, sometimes however not until thirty-six to forty-eight hours.

In two cases it acted more promptly on large than small joints; affections of the elbow and wrist, which occurred several days after those in the phalanges were cured long before them.

Its influence extends to the synovial membrane, and contributes powerfully to the absorption of the effusions which exist in almost all cases of acute rheumatism.

Its influence on the nervous system is very remarkable, as soon as

the doses are a little increased, there was observed a certain excitement of brain, characterized by nocturnal visions, by a peculiar gaiety and a great vivacity of impressions; the circulation of the brain appeared to be modified in such a way as to produce vertigoes. Dazzlings and flushes of heat in the face. Digestive organs were but little or not at all affected. Appetite returned after second or third day and remained. Some complained of a disagreeable mouth and had a little whiteness of tongue. Stools were increased in frequency in one case only. But not altered in quantity or quality.

Hence he is brought to consider that this remedy acts neither as a derivative, nor a sudorific, but as a *specific remedy against rheumatic inflammations, and whose action is upon the fibrous and tendinous parts which surround the joints, as also upon the synovial membrane lining them.*

DIERBACH classes Aconite among the *Diaphoretica-acrida* in company with :

Ledum-palustris.

Rhododendron-chrysanthum.

Rhus-toxicodendron.

Dulcamara.

Pulsatilla-nigricantis.

Chelidonium-majoris.

LOMBARD says STORK, who first gave this remedy in rheumatism, thought he observed a sudorific virtue in it, and was struck with this indication; however in eight or ten cases of acute articular rheumatism, which I (Lombard) have treated with Aconite, there was but one in which its use was followed by a bundant perspiration; all the other cures were obtained without any sudorific action, *and even in one case it arrested copious sweatings which had lasted fifteen days.*

VOGT says in small doses even it causes in particular a great increase of the secretions, and adds, this action is most marked upon the skin where besides *copious sweats* it often causes violent itching, and formication with springing up of vesicles.

STORK noticed its great affinity to the skin, especially when perspiration has been suppressed.

DIERBACH says even in small doses it exerts a great influence upon the skin, this Stork noticed in his experiments upon himself, and thence drew the conclusion that it might prove serviceable in rheumatic and arthritic affections.

The diaphoresis takes place under violent itching, and in arthritic and rheumatic diseases not infrequently passes over into profuse sweats, which at times however only shew themselves upon the diseased parts, upon which red vesicles (perhaps like rheumatic miliaria) or pustules filled with watery fluid at times spring up.

In some persons it also excites an abundant secretion of strongly saturated urine.

Sobernheim thinks it acts especially upon the skin and uropoetic organs, causes increased and altered urine, which is very much saturated and highly tinged.

Clinical Remarks.—Dupont has published a curious case of chronic general perspiration, which had lasted upwards of six years, and resisted all treatment, until Ext.-Aconite, was given, at first in one-half grain doses, gradually increased until sixteen grains per day were taken. (See Wilson on Skin, p. 272.)

Skin.—Prickling and crawling in the skin, and desquamation, attended with itching, and occurring on the diseased parts only. Prickling and soreness of the skin. Dry burning hot skin. Spots like flea-bites on the hands and face. Broad, reddish, itching vesicles over the whole body, and filled with an acrid fluid. Marked yellowness of the skin. Slight yellowness of the skin and whites of the eyes.

ACTEA RACEMOSA.

CIMICIFUGA RACEMOSA. (*Black Snake-root.*)

AUTHORITIES.

Wood and Bache. (7.) Transactions Am. Med. Association. Pereira (3.) Dr. H. D. Paine, N. A. Journal of Hom., Vol. 3. (23.) Duglison's New Remedies. (16.) Peters. (11.) Marcy. (10.)

PATHOGENETIC EXPERIMENTS.

Dr. Mears, who tried it upon himself, reports a decided impression on the brain, evinced by a distressing pain in the head, and giddiness; it also increased the force and fulness of the pulse, and produced a flushed condition of the face, followed by uneasiness in the stomach, and violent efforts to vomit.

Dr. Garden had previously mentioned the tendency to affect the brain, which is compared to that of *Digitalis*; he also thinks that it acts powerfully upon the secreting organs and absorbents, and in large doses, causes nausea, vertigo, anxiety, great restlessness, and *pains in the extremities*.

CHAPMAN says if given so as to sensibly affect the system it causes first: some nausea, greater freedom of expectoration, more or less relaxation of the skin, with *slight nervous tremors* and some vertigo; the pulse is apt to be considerably lowered and to remain so for some time.

It has also been supposed to act specifically upon the uterus.

Dr. Hildreth, of Ohio, has found it in large doses to cause some vertigo, impaired vision, nausea and vomiting, and a reduction of the force of the circulation.

Dr. N. J. Davis, of New-York, has uniformly found it to lessen the force and frequency of the pulse, to soothe pain and allay irritability.

From the experiments conducted by our Dr. Henry D. Paine, of Albany, we find among the most prominent symptoms:

Restlessness, early in the morning, continuing for a week.

Disposition to *perspire* at night, continuing for three weeks ; these perspirations were irregular, usually occurring three or four times a week, about three, A. M., commencing while asleep and disappearing a few minutes after waking ; never profuse. During the first week, the surface was cold with the perspiration, but during the last ten days, the perspiration was attended by heat rather than coldness.

Pain in the eye-balls, was one of the most constant symptoms ; it was an aching pain situated in the centre of both eye-balls, rarely in one alone ; it continued about three weeks after leaving off the drug.

Another well marked symptom was *anorexia*, lasting for two weeks ; a sensation of faintness in the epigastrium was also an important symptom, usually experienced in the morning, before eating ; it did not entirely prevent eating, which was followed by a sense of repletion, as if too much food had been taken.

Bowels regular at first, followed by alternate constipation and tendency to diarrhœa.

Symptoms of catarrhal fever are supposed to be among the most common effects of the remedy, viz., pain in the head, coryza, sore throat, dry, short and hacking cough, night and day for two weeks.

Wood and Bache think that it stimulates the secretions of the skin, kidneys and pulmonary mucous membrane ; from Dr. Paine's experiments it would seem to cause perspiration, and eruptions upon the skin ; also frequent urination, and increased flow of pale urine ; finally, it excites secretion from the nasal and bronchial mucous membranes.

It is supposed by some eminent physicians to be a good substitute for ergot in parturition, although it acts in quite a different way, viz., by relaxing the parts, thereby rendering labor short and easy.

Its action in rheumatism is said closely to resemble that of Colchicum. (11.)

Nervous System.—It is said undoubtedly to exercise considerable influence over the nervous system, probably of a sedative character, but this influence is shown rather in morbid states of the system, than in health. Very large quantities cause no alarming effects. It is said to soothe pain and allay irritability. (11.)

1) *Nerves of Sensation.* Its action upon these nerves seems to be secondary to its action on the vascular system. (11.)

2) *Nerves of motion.*—It seems to exert a peculiar and specific action upon some of the diseases of the nerves of motion, especially in *chorea*, more especially when a rheumatic irritation falls upon the nerves of motion and the muscles, and causes St. Vitus' Dance.

Case 1.—A boy, aged 11, had had chorea for four months ; one side was affected, and in almost constant motion, except when asleep ; he had been under medical care all the time without avail. He then took one teaspoonful of Pulv. Black Snake-root, every morning for three days, then omitted it three, then resumed it again, until he had

taken it nine times. When he had taken six doses he was almost well; when he had taken nine doses he was perfectly well, and remained so for at least four years.—Dr. JESSE YOUNG.

Case 2.—A girl, sick with chorea for a month; after taking three doses, she was very much improved; six doses cured her entirely. In this case it pricked severely every time it was taken.—*Ibid.*

Case 3.—A lady, aged 19, had chorea for two weeks, her left side was almost constantly in motion; it did not prevent her sleeping; her general health was perfectly good, and no cause could be detected. She took an emetic of Tart. ant.; then a large dose of Calomel and Jalap; then a purge every morning of Cream-Tartar and Jalap for seven days, when Dr. Young was actually startled for he found that the chorea had extended to the right side and was tenfold aggravated; her arms, legs, head, face, tongue and every muscular part was in continual, and irregular motion; she could with great difficulty speak intelligibly; the power of swallowing was lost to a great degree; she could not walk one step, nor stand up without support; nor could she sleep day or night on account of the constant twitching and jerking of the muscles.

Dose.—One teaspoonful of powdered Root, three times a day; in five days she was much better; could walk 3 or 400 yards; could speak and swallow as well as ever; slept well at night; her legs had but little irregular motion, her head was steady, and the muscles of her face scarcely agitated; her arms were more affected than any other part. In seven days more she was quite well. It neither vomited, sweated, purged, or acted on her kidneys; the only sensation she had was an uneasy feeling, almost amounting to an ache through all her limbs, after every dose, and continuing for three or four hours.

Case 4.—Was cured in a few days.

Dr. Physick cured several cases with ten grain doses every two hours.

Dr. Wood cured a case after the failure of purgatives and metallic tonics; also a case of periodical convulsions connected with uterine disorder.

Case 5.—A girl, aged 9, whose mental faculties were much disordered, and who had lost nearly all power over the left arm and leg; bowels irregular, headache, and pain frequently shooting down the left arm. Was cured quickly.

Case 6.—A very intractable case was cured by Dr. Otto.

Case 7.—A girl, aged 18; chorea with considerable gastric derangement, with suppression of menses for five months.

Dose.—Five grains every three hours; no improvement for nearly a week; then improved rapidly and was well in three weeks.

Dr. Davis says we can no longer doubt its efficacy in chorea, in all cases arising from undue irritability or mobility of the nervous system, especially when induced by exposure to cold; in short, when chorea arises from a rheumatic irritation of the motor nerves and muscles, or of the anterior column of the spinal marrow. (11.)

Drs. Garden and Chapman say that in large doses it causes anxiety, *great restlessness, slight nervous tremors*, and pains in the extremities. As it requires large quantities to produce these effects, it may be possible that large doses only are homœopathic to chorea. (11.)

Vascular System.—Dr. Davis has never known it to produce a perceptible increase of any of the secretions; nor has it the slightest stimulating properties. He has uniformly found it to lessen the force and frequency of the pulse, to soothe pain and allay irritability. In a word, he regards it as one of the most purely sedative agents we possess; he says it causes a depression of the pulse which remains for a considerable time. In acute rheumatism the only visible effects of the *Actea* are: diminution of the force and frequency of the pulse, disappearance of the arthritic pains and inflammation, with occasional vertigo, or disposition to fall on attempting to assume the erect attitude. Hence it seems to exert a decidedly depressing and sedative effect upon the vascular system. (11.)

Like many other drugs which exercise a specific action upon the nervous system, the primary effect of *Actea*, when given in small doses, is slightly stimulating to both the nervous and vascular systems, causing a slight increase in the force and frequency of the pulse, and followed speedily by a permanent depression of the circulation. When administering it for mild attacks of rheumatism, we have in several instances observed this primary and secondary action. Among the secondary effects which are sometimes strongly marked, are diminished nervous irritability, and disposition to sleep. (10.)

Mind and Sensorium.—Vertigo, impaired vision, dizziness, dulness in the head. Vertigo, fulness and dull aching in the vertex. Vertigo, anxiety and great restlessness. (23.)

Head.—Acute pain generally through the head during the day, at times more severe on the left side.

Remittent headache of long standing, more or less severe every day, but increased every second day.

Dullness of the head and pain in the forehead and occiput.

Dull, boring pain in the forehead, over the left superciliary ridge, continuing for two hours.

Pain from the eyes to the top of the head, which seemed as if the nerves were excited to too much action, lasting three hours.

Pain in the forehead, dryness of the pharynx; aching in the eyes, apparently between the eyeball and orbital plate of the frontal bone.

The pain in the head is always relieved by the open air. (23.)

Dr. Mears reports a decided impression on the brain, evinced by a distressing pain in the head and giddiness, with increased force and fulness of the pulse and flushed face. Dr. Garden had previously mentioned the tendency to affect the brain, somewhat like *Digitalis*. (11.)

Severe pain in the eye-balls, extending into the forehead, and increased by the slightest movement of the head or eye-balls. Dull

pain in the occipital region, with shooting pains down the back of the neck. (10.)

Clinical Remarks.—1. A lady, æt. 35, has suffered from dyspepsia for several months, and for nine days past from severe pain in the forehead over the right eye, and extending to the temple and vertex, with fulness, heat and throbbing; and when going up-stairs, a sensation as if the top of the head would fly off. Coldness and chills, particularly of the arms and feet; faintness in the epigastrium; pain and regurgitation of food after eating. *Actea-racem.* 1. three drops, three times a day, afforded prompt and permanent relief.—PAINÉ.

2. Mrs. W., æt. 47, has not yet passed the critical period, and suffers from various neuralgic pains incident to that time. Now suffers from severe pain in the head, particularly in the forehead and eyeballs. *Actea-racem.* 2. afforded prompt relief in a few hours.—PAINÉ.

3. In a case with the following symptoms; dull pain in the head, fulness in the forehead and eyes, pain the eyeballs, increased secretion of tears; fluent watery coryza, frequent sneezing, soreness in the throat, causing difficulty in swallowing; cough, particularly at night, caused by tickling in the throat; cured in two days by *Actea-racem.* 2.—

PAINÉ.

Dr. Davis says it will relieve many cases of severe headache from simple irritation of the brain in delicate females.—Dose: A wine-glass-full of decoction of root, every three or four hours.

In rheumatic headaches it has occasionally proved curative after the failure of *Bryonia*. (10.)

Eyes.—Aching of the eyes. Aching pain in both eyeballs, rarely in one alone, continuing for three weeks after discontinuing the drug. Pain in the eyeballs; increased secretion of tears, constant dull aching pain in the right eyeball, and across the forehead, accompanied with nausea.

Stinging of the eyelids; dullness and heaviness of the head and eyes, as if produced by cold. (23.)

Severe pain in both eyeballs, extending to the forehead and increased by any movement of the eyes or head. (10.)

Clinical Remarks.—A young lady, æt. 20, of light complexion, has suffered for several weeks past from ophthalmia; pain in the eyeballs, a sensation as if they were enlarged. Most severe in the morning. Prickling in the inner canthus, aggravated by reading. Inflammation of the eyelids, slight secretion of mucus only in the morning; sore throat; reading causes headache. *Actea-racem.* 1, three drops, three times a day, entirely removed all the pain in the eyeballs and head.—

PAINÉ.

It seems homœopathic to rheumatic and catarrhal ophthalmia; it may prove useful in scleritis and iritis. (11.)

In rheumatism or neuralgia affecting the structures of the eye, it is a remedy of considerable value. Its action in these cases resembles that of *Bryonia*. (10.)

Nose.—Frequent sneezing and fluent coryza during the day. Copious coryza. Fluent coryza, aching and soreness in the nose, during the day. Fluent watery coryza; frequent sneezing; soreness in the throat, causing difficulty in swallowing.

Very profuse greenish and slightly sanguineous coryza after rising; fulness of the pharynx, and constant inclination to swallow; dulness of the head, and pain in the forehead and occiput. (23.)

Clinical Remarks.—Some authors say that they have never known it to produce a perceptible increase of any of the secretions; others say that it operates powerfully upon the secreting organs and absorbents, and that it is expectorant and diaphoretic. It certainly seems homœopathic to catarrhal affections (11.)

Mouth.—Offensive breath. Dryness and soreness of the lips. Unpleasant taste in the mouth; accumulation of thick mucus upon the teeth. (23.)

Throat.—Dryness of the pharynx and inclination to swallow. Fulness of the pharynx, and constant inclination to swallow. Soreness of the throat when swallowing; sensation of fulness, and stiffness of the neck.

Sensation of rawness in the throat; hoarseness, which increased towards night; constant unpleasant fulness in the pharynx. Palate and uvula red and inflamed. (23.)

Clinical Remarks.—It has cured chorea when attended with almost complete loss of the power of swallowing. (11.)

In the sore throat and cynanche maligna a decoction of the root is recommended by Dr. Barton. (44.)

It is an excellent remedy against dryness of the throat, or a dry spot in the throat, causing cough. Also in dry coughs proceeding from irritation and tickling at the lower part of the larynx. (10.)

Appetite and Stomach.—Eructations and slight nausea. Pain and regurgitation of food after eating. Loss of appetite. Repugnance to food. Nausea and vomiting. Sense of internal tremor in the stomach after breakfast. Faintness in the epigastrium, with repugnance to food. (23.) It requires large doses to produce nausea, and then almost only when taken on an empty stomach.

Clinical Remarks.—It is peculiarly homœopathic to a faint and sinking feeling at the pit of the stomach (11.)

Dr. Mears asserts that *Actea* produced upon himself a decided impression upon the brain, followed by uneasiness at the stomach, and violent efforts to vomit. It is highly probable that many of the gastric symptoms are due to the action of the drug upon the brain, rather than to any direct influence upon the stomach. (10.)

Abdomen.—Flatulence, causing a sensation of fulness in the abdomen; Rumbling of flatus below the umbilicus.

Fulness and pressure in the lower part of the abdomen. (23.)

Stool.—Disposition to diarrhœa. (23.)

Urine.—Increased flow of urine. (23.)

Genital Organs.—*Clinical Remarks.*—It has been supposed by some eminent physicians to be a good substitute for ergot in parturition, being dissimilar, however, in its mode of action, relaxing the parts and thereby rendering labor short and easy. Hence it is useful where there is great rigidity of the soft parts, such as occurs in females who have their first children late; or in those who are remarkably firm, and muscular, or in whom the os-uteri dilates slowly from great muscular resistance and rigidity. (11.)

In cases of parturition where the vagina is dry, and the os is rigid, this remedy will do good service. It facilitates labor by rousing into increased action the mucous membrane, and thus supplying the parts with a lubricator.

In domestic practice it is occasionally employed to produce abortions, and in a few instances with success. In these cases a decoction of the root is used. (10.)

Larynx.—Hoarseness; unpleasant fulness in the pharynx. Constant inclination to cough, caused by a tickling sensation in the larynx, which almost prevents speaking. Short dry cough in the evening and at night; fluent coryza. (23.)

Clinical Remarks.—CHS. SUMNER, M.D., while attempting to obtain provings of *Actea-racem.*, did not observe any decided symptoms from the medicine, yet was relieved of a very troublesome hacking cough of some months' standing. Dr. Garden thought highly of it in consumption. In some parts of the country it has become a very popular remedy for coughs. Dr. Wheeler has found it useful in several cases of severe and protracted cough, especially in the chronic cough or bronchitis of old people. Dr. Hildreth advises it in acute phthisis, or *galloping consumption*; he has often seen the most prompt relief from the decoction alone against the febrile excitement, or hectic paroxysms, also in allaying the cough, reducing the rapidity and force of the pulse, and promoting gentle perspirations; he has often seen the same happy influence exerted against those intercurrent congestions and inflammations so frequent in the second and third stages of consumption, especially when caused by taking cold. (11.)

Actea is an excellent remedy in dry, irritating coughs, with great dryness of the mucous membrane of the throat and larynx. It is most happy in its effects at the 12th to the 15th dilutions. (10.)

Chest.—The pain in the head continued for ten days, followed by coryza, with sore throat and gradual extension of the disease to the bronchial mucous membrane; dry short, and hacking cough night and day, continuing two weeks, which is uncommon; the prover not having had a catarrh or cold for several years. Acute pain in the right lung, extending from apex to base, aggravated by inspiration. Lancinating pain along the cartilages of the false ribs, increased by inspiration. Soreness of the chest. Cold chills and prickling sensation, during the day, in the (female) mammæ. Prickling sensation in the breasts. (23.)

Clinical Remarks.—*Actea* is a useful remedy in rheumatic inflammations of the lungs, especially in that form of consumption which arises without any especial hereditary tendency, from carelessness and exposure to cold and wet. Dr. Garden used it successfully for twenty years. He says, shortly after commencing its use the hectic paroxysms are entirely checked, the night-sweats begin to diminish, the purulent expectoration is speedily improved, the cough becomes less troublesome and frequent, the pulse falls from 120 or 130 to the natural standard, the pains in the breast and sides abate, strength and appetite improves. It is supposed to possess the peculiar power in an eminent degree of lessening arterial action and at the same time imparting tone and energy to the system. (11.)

In one case of pericarditis following an attack of inflammatory rheumatism, we observed excellent effects from the use of 3d dilution of *Actea*. It has often proved serviceable in pleurodynia of long-standing. (10.)

Superior and Inferior Extremities.—Dull pain in the right arm, deep in the muscles, extending from the shoulder to the wrist. (23.) Dr. Garden experienced pains in both the upper and lower extremities from the use of large doses.

Clinical Remarks.—The efficacy of *Actea* in chorea has already been dwelt upon. The evidence of a favorable influence over rheumatism is of a decided character. Very many cases, including the severest forms of *acute inflammatory* rheumatism have been treated with results satisfactory in the highest degree, every vestige of the disease disappearing in from two to eight or ten days, without inducing any sensible evacuation, or leaving behind a single bad symptom. It is particularly useful in the *early* and *severe* stages of acute rheumatism. It is comparatively of little use in sub-acute and chronic rheumatism; the more acute the disease, the more prompt and decided will be the action of the remedy. In large doses it causes vertigo, dimness of vision, and a depression of the pulse, which remains for some time.

From thirty to sixty drops of the Tincture have usually been prescribed every two, four or six hours.

It seems somewhat homœopathic to rheumatism, or at least to rheumatic pains, as it caused in one case, of Dr. Jesse Young's, an uneasy feeling, almost amounting to an ache, through all the limbs, occurring after each dose and lasting for three or four hours; while Dr. Garden says it causes great restlessness and pains in the limbs. Still it requires large doses to cause these effects. (11.)

We have been in the habit of employing this remedy occasionally in rheumatic affections, during the past eighteen years.

We have prescribed at all doses from the nauseous decoction of the old school to the highest homœopathic attenuation; and good results have followed both forms of the medicine, although experience has long since taught us to rely upon the latter form. It is most serviceable in articular rheumatism of the inferior extremities, with much swelling, and heat in the affected joints, and pain on moving the parts.

Like Bryonia it exercises a special control over inflammations of the serous membranes; but its range of action, and consequently its applicability in rheumatic affections, are decidedly inferior to this drug. (10.)

Back.—Stiffness of the neck. (23.) Drawing pain in the lumbar region. Pulsating pains in the region of the kidneys. (2.)

Clinical Remarks.—Actea is homœopathic in rheumatism affecting the dorsal muscles, and in some cases of chronic nephritis. The Actea-spicata has been successfully employed in calculous affections of the kidneys. (10.)

Skin.—Eruption of white pustules and large red papulæ on the face and neck.

Clinical Remarks.—A strong decoction is said to be an effectual remedy for scabies. (11.)

Fever.—Occasional cold chill. (See Vascular System.)

Sleep.—Very restless at night.

A C T E A - S P I C A T A.

HERB CHRISTOPHER.—*Baneberry.*

The tincture of the root has been usually employed. In large doses it acts as a purgative, and sometimes as an emetic.

Rückert advises it in prosopalgia, and in certain rheumatic and neuralgic affections of the face and head.

AUTHORITIES.

Petroz, (60). Linnæus, (61). Colden, (62.) Lemer cier, (63.) Rückert, (64). Marcy, (10).

PHENOMENA.

Intellectual Faculties.—Loss of consciousness. (60.) A sort of intoxication. Disturbance of the cerebral functions. (63.) Furious delirium. (61.)

Affections.—Sadness. Melancholy causing a distaste of life. Obstinacy. Complaints.

Head.—Boring pain in the head. The head-symptoms are more intense at night; they are increased by walking, and are generally periodical. (60.)

Frontal Region.—Pressure in the forehead, commencing early in morning. (60.)

Temporal Region.—Lancinating pain in the temples. (60.)

Vertex.—Pressure in the vertex. (60.)

Occiput.—Hammering pain in the occiput. (60.)

Scalp.—Sensation of horripilation in the hairy scalp. Eruption of small pimples in the hairy scalp. (60.)

Cranial Bone.—Pain which seems to be located in the periosteum and even in the cranial bone. (60.)

Conjunctiva.—Injection of the vessels of the conjunctiva. Ophthalmia of a catarrhal character. (60.)

Vision.—Blue colors appear in the objects which we look at. When fixing the eyes for a long time upon an object, spots appear before them. (60.)

Tears.—Flow of burning tears. (60.)

Ears.—The external ears are painful to the touch. When sneezing or masticating, lancinating pain in the ear. Murmur in the ears after sleeping, increased by mental emotions. (60.)

Nose.—Bruised feeling of the nose. Redness of the wings of the nose. Nasal secretion tinged with blood. Epistaxis, during an oppression of the chest. (60.)

Face.—Great sensitiveness of the face. Pain in the face similar to that of rheumatism. (60.)

Clinical Remarks—A girl, of twenty years of age, had a chill and was speedily attacked with a violent pain which commenced in a carious tooth of the upper jaw. This pain was pulling and tearing in its character, and extended to the zygomatic bone, and to the temples, and was increased by the lightest touch, or any movement of the facial muscles. Three globules of *Actea* removed this pain in a few hours. (60.)

The cheek upon which he lies perspires easily. Sweat upon the face. Cold sweat upon the forehead. (60.)

Lips.—Slight cracks upon the lips. The skin around the mouth assumes a light yellow color. (60.)

Saliva.—Increased secretion of saliva. (60.)

Buccal Cavity.—Fœtid breath. (60.)

Sub-maxillary Glands.—Pain in the sub-maxillary glands when eating. (60.)

Pharynx.—Sensitiveness of the throat when speaking. Tearing pains in the throat, especially when respiring cold morning or evening air. (60.)

Appetite.—Sharp appetite in the morning. Hunger with repugnance to meats. (60.)

Nausea.—Nausea. *Malaise* after eating. (60.)

Vomiting.—Inclination to vomit with giddiness. Vomiting of acid substances. Vomiting. (64.)

Stomach.—Cramp of the stomach. Painful sensation of pressure at the epigastrium. Cancer of the stomach. (60.)

Clinical Remarks.—Dr. Roth has given this medicine with advantage in cancer of the stomach. It is particularly useful when there is much tearing and darting pain in the epigastric region, accompanied with vomiting.

Abdomen.—General uneasiness in the bowels. Abdomen sensitive to the touch. Sensation of compression in the abdomen. Spasmodic contractions in the abdomen. Pain in the abdomen like that which precedes or accompanies menstruation. Pain in the abdomen like that which precedes diarrhœa. (60.)

Hepatic Region.—Pulsations in the right hypochondrium. Acute or chronic hepatitis. (60.)

Clinical Remarks.—Dr. Roth commends *Actea* in acute and chronic hepatitis. Rückert has also employed it successfully in hepatic affections.

Region of the Spleen.—Insensibility of the left hypochondria. (60.)

Flatulence.—Expulsion of a great abundance of flatulence. (60.)

Alvine Discharges.—Stools in the form of pap. Colic pains during the stools. (60.) Suspension of the evacuations. (64.)

Clinical Remarks.—In constipation from a lack of bile in the intestinal canal, Dr. Lemer cier has found this medicine quite serviceable.

Urine.—Frequent desire to urinate. Frequent desire to urinate and pain during the act. White sediment in the urine. (60.)

Respiration.—Difficulty of breathing, like an attack of suffocation. Difficulty of breathing, with lancinating pain in the epigastrium on taking a long breath. Difficulty of breathing, with pain in the stomach. Whistling respiration. Difficulty of breathing, with painful shocks in the abdomen at each inspiration. Respiration seems difficult in consequence of weakness, especially obvious when expiring. Difficulty of breathing with pain in the hip. (60.)

Rheumatic Pleurisy.—(60.)

Clinical Remarks.—This remedy is homœopathic in rheumatic affections of the intercostal muscles, and in pleurisies which sometimes occur during attacks of inflammatory rheumatism. (10.)

Renal Region.—Sensation of beating in the region of the kidneys. Calculi of the kidneys.

Clinical Remarks.—Dr. Roth has employed *Actea* with considerable benefit in calculous affections of the kidneys. It is especially appropriate in those cases which occur in individuals of gouty diatheses.

Sacro-lumbar Region.—Tearing pain in the loins. Bruised pain in the sacral region when lying on the side. (60.)

Hands.—Pain and paralytic weakness of the hands. (60.)

Clinical Remarks.—A women, forty years old, subject to rheumatic affections and hæmorrhoids, had been attacked, apparently in consequence of a chill, with severe pains in the articulations of the hands and thumbs, accompanied with swelling. The least movement rendered the pains insupportable. Three globules of *Actea* 30th, produced a decided amelioration in a short time. A second dose, three days afterwards, effected a perfect cure. (65.)

Fingers.—The fingers are numb, cold, and discolored. (60.)

Inferior Extremities.—Swelling of the lower limbs. Boring pain in the legs, which is relieved by extension. Weakness of the lower extremities after changes of temperature. Swelling of the joints after a little fatigue. Trembling of the thighs on raising them. Sensation of great lassitude in the knees. Inflammation of the knee-joint. (60.)

Clinical Remarks.—In rheumatic affections of the large articulations, this is a remedy of considerable value. It has proved most beneficial in cases accompanied by biliary derangement, and is appropriate in both the acute and sub-acute varieties. (10.)

Coldness.—Coldness after drinking. Rigors followed by heat, during which vomiting occurs. Eructations during the chill. (60.)

Sweat.—Viscid sweat. Hot sweat upon the head. *Malaise* and cold sweat. Suppression of the perspiration. (60.)

Clinical Remarks.—Colden advises a dilution of *Actea* for weak and nervous patients who are troubled with frequent cold sweats after slight exertions of mind or body. It is also homœopathic in suppressed perspiration, especially when occurring in rheumatic subjects. (10.)

Fever.—*Cephalalgia* which continues after the fever has subsided. Delirium during the fever. (60.)

Strength.—Sudden lassitude without any appreciable cause. Lassitude after eating. Lassitude after speaking a long time. Debility from walking in the open air. (60.)

General Symptoms.—Pulsations throughout the body. Fermentation of the blood. (?) The pains are generally tearing and pulling. The symptoms manifest themselves particularly after mental emotions, walking, fatigue, speaking, eating, by the use of salt meats, beer, and by inhaling the fumes of tobacco.

Most of the symptoms appear in the morning, and especially when in the open air.

Its action is most decided in affections of the parenchymatous organs, the seat of old inflammations, or of active sanguineous congestions. (60.)

This medicine is especially suitable to men. (60.) The characteristic symptoms are weakness and tingling. (60.)

ADEPS.

HOGS' LARD.

AUTHORITIES.

Waring's Therapeutics. (44.) Frank's Magazine. (4.) Peters. (11.)

CLINICAL RESULTS IN SKIN DISEASES.

In Scarlatina: Inunction of the surface with lard was first proposed by Dr. Schneemann of Hanover, and has since been adopted successfully by Dr. Mauthner of Vienna, Mr. Taylor of London, and others. The treatment has been further tested by Professor Ebers of Berlin, who treated twenty-two cases, eleven of which presented one or more of the severe complications, and of whom six died; of the twenty-two, the inunction with lard was tried in thirteen cases, and the ordinary remedies in nine; of the latter five died; of the former, only one was fatal, and this was beyond hope when the treatment was commenced; the remainder recovered. Prof. Ebers concludes that the inunction with lard does not interfere with the development of the eruption; for this comes out on the third day and declines on the fourth or fifth. (44.)

The complications of the disease disappear more favorably than under the ordinary treatment.

No desquamation or anasarca ever follows the use of the lard.

The inunction seems to destroy the contagious principle.

The lard requires to be diligently rubbed in, over the whole surface of the body every morning and evening. (44.)

Mauthner treated his own daughter, aged 15, successfully with it. (4.)

In Measles, the Exanthemata generally, and in inflammatory and typhus fevers: In these diseases inunction with lard is strongly advised by Mr. Taylor; he relates numerous instances in which inunction with an ointment composed of equal parts of lard and suet, was attended with the best effects. No internal remedies were employed. He states that it reduces the force and frequency of the pulse, and when employed at an early period of the disease, that it wards off a typhoid condition. The dry and brown tongue becomes clear, the patient falls into a sound sleep, and delirium subsides; in fact, all the symptoms improve with a steadiness and rapidity not seen in other methods of treating fevers. (44.)

In Erysipelas: Erasmus Wilson considers that inunction with lard is in every way superior to all fluid applications. He at first, at the suggestion of Mr. Grantham, relaxes the skin with hot water or steam, and then saturates the surface with hot lard, which is afterwards covered with wool. He also speaks highly of the value of lard inunctions, in the treatment of *violent sprains*. (44.) Mauthner also uses it in burns and erysipelas. (4.)

In Itch : Professor Bennett used lard inunction in four cases of itch, and in each a cure was speedily effected. From these and other cases, he infers that the efficacy of Sulphur-ointment mainly depends on the unctuous matter which it contains. It is of importance that the parts should be kept moist, and for this purpose, oil-silk so as to completely envelope the parts should be used. The same treatment has been found successful by Mr. Bazin, who found that six frictions during three days were sufficient to effect a cure of itch. (44.)

In Consumption : In Frank's Magazine about twenty cases of consumption more or less successfully treated with lard inunctions are reported; the hectic fever and sweats soon abated, and all the patients improved in flesh and strength; it may be tried in cases in which cod-liver oil cannot be used internally.

In profuse sweats : Several cases are reported in which it removed profuse and debilitating perspirations in non-tuberculous persons.

In Scrofula : It has also been used successfully.

In all cases, the lard used should contain no salt; if the lard has already been salted, this should be worked out in water.

Æ T H E R. (*See Ether.*)

ÆTHUSA CYNAPIUM.

GARDEN HEMLOCK.—FOOL'S PARSLEY.

AUTHORITIES.

Roth's Materia Medica. (65.) Homœopathic Examiner, Vol. 1. New Series, p. 400. (66.) Noack and Trinks' Mat. Med. (67.) Christison. (9.) Taylor's Medical Jurisprudence. (8.) Peters. (11.) Frank's Magazine. (4.)

TOXICOLOGICAL EFFECTS.

This plant has received the common name of Fool's Parsley, from its resemblance to common Parsley, and the unpleasant accidents, which have occurred from mistaking the one plant for the other. It has a botanical alliance with *Conium-maculatum*, *Cicuta-virosa*, &c.

Case 1.—A woman gave two of her children some soup, in which she had boiled the root of this plant, mistaking it for parsley. They were both seized with severe pain in the abdomen, and the next morning one of them, a boy, aged five years, was in a state of perfect unconsciousness, with his jaws spasmodically fixed; the abdomen was swollen, and there was vomiting of bloody mucus, with obstinate diarrhœa; the extremities were cold and the whole body convulsed. Death ensued in twenty-four hours, and the only post-mortem appear-

ances met with were: redness of the lining membrane of the œsophagus and trachea with slight congestion of the stomach and duodenum.

Case 2.—A child, aged six years, died in six hours; it had cramps in the stomach, which forced it to cry out aloud; the abdomen swelled and soon became livid.

Case 3.—From seven ounces of the juice, followed by death in one hour. The symptoms were great prostration, dilatation of the pupils, irregular, first strong, then weak action of the heart, then convulsions followed by stupor and death.

Case 4.—A scrofulous girl, aged twelve years, partook of some of the fresh herb. Towards evening she complained of general malaise and anorexia, which continued during the whole of the next day; towards noon of the second day, she was taken with violent headache, frequent vomiting of greenish substances; vertigo, dry heat, confusion of, and inability to raise the head, or keep an erect posture. Pulse full and quick, face periodically œdematous, and mottled with red spots. Her treatment consisted of the frequent application of cold water to the head and face, and injections of Acetic-ac. dilut., Lemonade, Aqua-oximuriat. with Syr. Cinnamoni. On the third day, however, there was no change for the better. She then had leeches applied for the relief of violent stitches in the left side, but without avail. On the fourth day, she also had stitches in the chest, dyspnoea and great prostration of the whole system. On the fifth day, after having had a few stools she began to improve. During the whole attack there was a constant dry heat of the skin, but attended with a total aversion to all kinds of drink.

Case 5.—A child, four years old, ate some of the fresh herb; it was seized with violent epileptic convulsions, the thumbs were turned in, the face was red, pupils dilated, eyes immoveable and turned downwards; there was foaming at the mouth of milky-white substance, the teeth were firmly set, pulse small, hard and frequent; temperature of the body normal.

Case 6.—A child, eight years old, had paleness of the face, violent vomiting of a frothy milky white substance; eyes fixed, widely open, and of a lifeless appearance; pupils dilated, and not influenced by the action of the light; extremities cold, and the general appearance of the body lifeless. Of all the remedies administered milk seemed to have acted the most beneficially. A perfect recovery of cases five and six took place on the third day. (4.)

GENERAL EFFECTS.

ON THE NERVOUS SYSTEM. *Nerves of Motion.*

According to Christison it is more apt to cause convulsions than any other Hemlock. It is homœopathic to violent epileptic cramps, with turning in of the thumbs, redness of the face, convulsive movements of the eyes, which are turned down spasmodically, very great dilatation of the pupils, frothing at the mouth, clenching of the teeth,

small, hard and quick pulse, with natural warmth of the body, or coldness of the extremities. From its marked action on the stomach, bowels and liver, it would seem most homœopathic to the abdominal- or ganglionic-epilepsy of Schœnlein. In this disease the patient first experiences from time to time a gnawing, contracting, burning or piercing pain in the region of the navel, corresponding to the superior- or inferior mesenteric plexus of nerves; this pain may subside on the setting in of a feeling as if a vapor or a hot flame passed over the part. This aura may ascend to the stomach, followed by a feeling of spasm there, and by vomiting of an albuminous fluid; or it may extend from the stomach towards the right hypochondrium, followed by slight and transient signs of jaundice, such as yellowness of the whites of the eyes, yellowness of the face and tongue, &c.; or it may progress at once towards the brain, and an actual paroxysm of epilepsy may promptly occur. *Abdominal-epilepsy* is said to happen most frequently between the seventh and eleventh years of life; it is four times more frequent in males than females; the attacks are most common towards the full of the moon, after which they lessen, and towards the last quarter they are entirely absent.—SCHÖNLEIN.

If *Æthusa* be homœopathic to epilepsy it ought to be antipathic to paralysis, yet Noack has recommended it in *paraplegia inferior*: It causes great debility, lassitude, and tiredness, especially in the legs, attended with drowsiness; also paralytic pain in the left shoulder; sudden lassitude of the forearms while knitting; weakness of the right wrist; paralytic pain in the thighs while sitting, disappearing after motion; great lassitude of the legs. These are all symptoms which point to great debility and perhaps to approaching paralysis; but as *Æthusa* is preëminently a convulsive remedy, it must be antipathic to paralysis, except when it occurs in consequence of the exhaustion which succeeds previous convulsive action. (11.)

Nerves of Sensation.—It is supposed to act much less specifically upon these than upon the nerves of motion; in fact, most of the *Æthusa*-pains are *rending* and *piercing*, such as occur in muscular or fibrous strictures, and are comparable to rheumatic- or muscular contractive pains, like labor-pains. Thus, it is homœopathic to *rending* and *piercing* pains in the muscles; in the head, especially in the temples, mostly in the afternoon; in the ears; zygoma; in the gums; in the epigastrium, extending up to the œsophagus; in the lumbar and hypochondriac regions; in the nape; in the elbow, hand and finger-joints; in the thighs, knees and feet. (11.)

Muscular System.—Any remedy which acts specifically upon the nerves of motion almost necessarily acts equally specifically upon the muscles. It may prove homœopathic to the convulsions which attend Bright's disease. (11.)

VASCULAR SYSTEM.

Fever.—Chill in the room, chill after having walked in the open air. General coldness. Internal coldness. Coldness of the whole body, accompanied by somnolence; coldness of the whole body,

perceptible to the touch, without thirst, for two days. Redness of the face during the coldness. Horripilation, with heat extending over the whole body. Painful lassitude, hot breath and jactitation during the horripilation. General heat. *Complete absence of thirst*, notwithstanding the great general heat. General sweat. He cannot bear to be uncovered during the sweat. Irregular pulse, full, accelerated, imperceptible pulse. The febrile symptoms manifest themselves, more especially in the morning, with very great malaise and disposition to delirium, which go off during the sweat. (4.)

Abdominal Typhus.—It causes blackness and dryness of the tongue, buzzing in the ears, and severe purging of light yellow bilious matters; these symptoms probably led Noack to suggest its use in typhoid fever. The stools in typhoid fever are for the most part loose and frequent, and either of a dark color and offensive, or else thin, yellow, and ochry, somewhat like pea-soup. But the most essential part in typhoid fever is the peculiar change in the blood, this consists in a diminution of the fibrin and an increase of the carbonated salts, especially of carbonate of soda. Numerous experiments have shewn, that in animals which have for a long time been submitted to the excessive use of alkalies, the blood becomes destitute of fibrin and rich in the carbonated alkalies; hence the alkalies are homœopathic to typhoid fever, and the acids, antipathic. It is not known whether *Æthusa*, *Rhus*, *Belladonna*, &c. also produce a change in the blood similar to that which occurs in typhoid fever. (11.)

Glandular System.—Roth says it is homœopathic to swelling of the lymphatic glands [of the neck; also of the axillary glands. It may prove homœopathic to some scrofulous affections, as it is found to produce tumefaction of the meibomian glands, chronic photophobia, stoppage of the nose with thick mucus, yellowish discharge from the ears, herpetic, excoriations of the thighs, great debility, emaciation, profuse perspiration from the least exertion, and general dropsy. (11.)

LOCAL EFFECTS.

Head.—Cephalalgia. Pains in the head and stupefaction. Throbbing, lancinating, tearing pain in the head. The head-pains are *periodic*, often co-exist with paleness of the face, trembling in the jaws, pains in the præcordial region. Violent headache as if the brain, were dashed to pieces. Weight in the forehead, with ill-humor.

Congestive Headache.—Beating in the head upon entering a room from the open air; painful beating in the left side of the forehead; rising of heat to the head, with increased heat of the body, redness of the face, and abatement of the preceding giddiness; tumult in the head, upon entering a room; the head feels dull and stupid, as of intoxicated; he looks serious and as if out of humor, does not feel disposed to talk and complains of heat in the head.

Gastric Headache.—Great anguish and restlessness, followed by headache and colic; weight in the forehead during dinner.

Rheumatic Headache.—Tearing pain in the head and paroxysms of darting and tearing pain.

Afternoon Headaches.

PATHOLOGY.—The dura-mater contained but little blood; pia-mater, engorged. All sinuses distended with a black fluid blood. Brain soft, with red spots. (3.)

Mind. Moral.—Great flow of spirit. Gay, in good humor, in the forenoon, sad and anxious in the afternoon. Very great nervous susceptibility, lasting a long while. Uneasiness, discontent even to grief.

Mental.—Difficulty in fixing his attention. Hallucinations. Delirium. Stupor. Stretched out without consciousness. (4.)

Sleep.—Somewhat disturbed sleep.

Clinical Remarks.—*Ranunculus-scleratus* is also homœopathic to disturbed sleep. (11.)

Face.—Drawing, tearing pains in the face. Transient heat in the face, cold sweat on the face. Pale face. Wan, red face. Expression of anguish on the countenance, and of acute pain. *Puffiness of the face during the menses.* The face periodically puffed and covered with red spots. *Edema of the face*, as in Bright's disease. Vesicles upon the face. It also produces the *linea nasalis* in a marked degree, viz., a line and expression of great anxiety, extending from the wings of the nose down to the angles of the mouth, considered characteristic of severe abdominal affections. (11.)

PATHOLOGY.—Face a little puffed, eyes half closed, pupils a little dilated, jaws set.

Eyes.—Swelling of the meibomian glands; gum in the eyes. The edges of the lids are glued together in the morning. Brilliant injected eyes. Pupils much dilated and insensible to light. Fixed look.

Clinical Remarks.—Roth says it is homœopathic and curative against: tumefaction of the meibomian glands; chronic inflammation of the edges of the lids; sticking together of the eyelids in the morning; pustules on the cornea; commencing amaurosis; and chronic photophobia. (11.)

Nose.—Lancinations on the left side of the nose, then burning pricking on the right side; afterwards pricking as if from a hot needle. Herpetic eruption on the end of the nose. Pain in the nose, as if ulcerated. Stoppage of the nose. Copious secretion of a hard nasal mucus.

Ears.—Lancinating pain behind the ears. Dryness of the ear; deficiency of cerumen. Puriform discharge from the ear. Troublesome hissing in the ears. Lancinating pain in the ear, ears from within outward. Pain, at times lancinating, at times tearing. Touch and pressure ameliorate many of the symptoms of the ear. Sensation as

if heat was rushing out of the ears; the ears feel obstructed; hardness of hearing, especially in the left ear. Rheumatic affections of the ear. (11.)

Clinical Remarks.—Roth says it is homœopathic to a yellowish discharge from the ears. (11.)

Mouth.—Tearing pain in the lower jaw. Pain in the submaxillary glands.

Throat.—Gnawing sensation in the lower teeth. Buccal cavity dry. Aphthæ in the mouth. Flow of saliva as copious as though she had been mercurialized; it lasted two weeks. Aphthæ and pustules in the throat, which render the state of the patient almost desperate. Itching in the throat, scraping, redness of the throat. Redness and swelling of the velum palati and the neighboring parts; inconvenience so as to threaten suffocation; heat in the throat. Dryness of the throat and frequent hawking.

Appetite.—Want of appetite. Burning thirst. Taste unnatural. Flat sweetish taste in the mouth, early in the morning on waking, attended with dryness of the mouth.

Stomach.—Nausea with depression. Eructations of air. Regurgitations of the ingesta. Difficult eructations. Violent vomiting of frothy matter, as white as milk. Vomiting after the administration of milk. Intolerance of milk; children return the milk almost as soon as it reaches the stomach, coagulated or not, in the course of ten or fifteen minutes, by a sudden and violent fit of vomiting, followed by weakness and drowsiness. Copious greenish vomiting. Vomiting and diarrhœa. Vomiting and diarrhœa of mucosity tinged with blood. Vomiting and fever. Vomiting with chill, sweat and weakness. Very violent pains in the stomach. Tearing pain in the stomach extending into the œsophagus.

Clinical Remarks.—This remedy is one of the most homœopathic to vomiting and diarrhœa; to cholera; it has been used very successfully against the vomiting of milk in infants; against regurgitation of food about an hour after meals; intolerance of milk; children throw up milk almost as soon as it swallowed, either coagulated or not coagulated, and by a sudden fit of vomiting, followed by great weakness and tendency to fainting.

PATHOLOGY.—Inflammation of the stomach and peritonæum, stomach reddish, and upper orifice contracted.

Abdomen.—Throbbing in the abdomen. Abdomen tight and tense. Abdomen inflated, sensitive, especially in the region of the liver. Abdomen large, inflated. Colic pains and diarrhœa. Lancination in hypochondrium. Bubbling as of boiling water in the umbilical region, followed by griping pain. Colic pains about the umbilicus, followed by soft stools in the morning on rising.

PATHOLOGY.—A blackish serum was found in the stomach, abdomen not inflated. Duodenum exhibited several spots of a clear yellow

color, as did the anterior biliary edge, a part of the colon, and of the epiploon. Inflammation of the stomach and peritonæum.

Liver, Bile, and Spleen.—The liver has been found hard and yellow; the spleen livid; the liver and spleen gorged with blood; vomiting of greenish bile and mucus; diarrhœa of thin, light-yellow or greenish bilious matters; bilious diarrhœa and dysentery; it produces some of the symptoms of bilious remittent fever when attended with bilious diarrhœa; it is homœopathic to acidity of the stomach and excess of bile. Distention of the abdomen, and painfulness to touch, especially in the region of the liver. (11.)

Clinical Remarks.—It is supposed to be homœopathic to the first stage of granular liver; in one case the liver was found hard and yellow; it also exerts a specific action on the duodenum and liver; it is homœopathic to that irritation of the duodenum which extends along the ductus-communis to the liver, thus causing a great accumulation of bile in the gall-bladder and a great overflow of bile, sufficient to stain the whole liver, duodenum and part of the colon and omentum with yellow bile: it is also homœopathic to pain and tenderness in the region of the liver. According to Corrigan the first stage of granular liver is marked by colic pains, generally felt about four or six hours after dinner, quick pulse, vomiting, constipation, or the stools may be loaded with mucus and sometimes tinged with blood. As the disease advances, the fits of colic occur more frequently, the vomiting becomes more intense, the skin dry, the pulse quicker, the tongue red and smooth; in most cases there is pain at the top of the right shoulder, and in all a degree of jaundice very slight at first, but progressing gradually and sufficiently distinct, if the conjunctiva be examined. There is also some slight pain in the region of the liver and duodenum. It is very evident that *Æthusa* is homœopathic to this train of symptoms. (11.)

Anus and Stool.—Severe tenesmus and evacuations of blood. Frequent diarrhœa, with violent vomiting; diarrhœa of greenish, slimy and bloody matters, or of thin light-yellow and greenish matters, with violent urging and tenesmus; bloody stools.

Clinical Remarks.—It is homœopathic to cholera infantum; to bilious diarrhœa and dysentery; to the diarrhœa of teething children, when attended with acidity of the stomach and decided bilious derangement. (11.)

Urinary Organs.—Frequent call to urinate; abundant pale urine.

Clinical Remarks.—It promises to prove homœopathic to Bright's disease; it is homœopathic to œdema of the face, and to the diarrhœa and vomiting which so frequently attends this affection. (11.)

PATHOLOGY.—Congestion of the kidneys.

Thorax.—Lancinations in the left side of the chest; lancination in the chest; violent palpitations of the heart. Palpitations which are felt in the head. Palpitations with vertigo, headache, agitation. Acute,

smarting pain with heat and redness of the breast, from external application; a multitude of phlyctenæ, vesicles filled with lymph appear on the breasts the next day and discharge a good deal of serous fluid on removing the covering.

PATHOLOGY.—Plethoric state of the lungs and heart; right ventricle filled with black fluid blood.

Respiratory Organs.—Painful, anxious respiration, very difficult respiration. Great oppression, cough, with sensation of tickling in the throat.

Upper Extremities.—Pain in the sub-axillary glands, swelling of the axillary glands. Arthritic stiffness of the elbow joint. Lancinating drawing in the middle of the forearm to the carpal joint.

PATHOLOGY.—Upper extremities covered with a great number of large blotches.

Lower Extremities.—Lancinating tearing pain in the inferior extremities. Tearing lancinating pain in the knee, heel.

Clinical Remarks.—Noack recommends it in paraplegia; it is homœopathic to great debility, lassitude and tiredness, especially in the legs, attended with drowsiness; paralytic pain in the left shoulder; sudden lassitude of the arms; weakness of the wrist; paralytic pain in the thighs; great lassitude of the legs. (11.)

PATHOLOGY.—Inferior extremities stiff; covered with a great number of large blotches.

General Symptoms.—General malaise. Great agitation. Præcordial anxiety. Anxiety and depression. Cries of anguish. Great general weakness. Remarkable emaciation of children. Epilepsy from convulsions; thumbs bent inwards, face red, eyes turned downwards, pupils dilated and immoveable, milky froth before the mouth, teeth set, pulse compressed, small, hard and frequent, temperature of the skin natural. Very violent convulsion, followed by death.

GENERAL PATHOLOGY.—Autopsy of an individual who had previously suffered from chronic gastritis. Extreme emaciation, inflammation of the peritonæum and bowels, suppuration of the exterior membrane of the stomach; sloughing spots at various points on the small intestines; scirrhus places in the epiploon.

Skin.—Burning heat and dryness of the skin. Crawling itching eruption around the joints. The whole body is blackish blue. Bloating Anasarca, Bright's disease.

PATHOLOGY.—Skin covered with a great number of large blotches. Extensive ecchymoses over the whole body.

AGARICUS MUSCARIUS.

FLY AGARIC. AMANITA.

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TOXICOLOGICAL EFFECTS.

This species of mushroom derives its name from killing flies when dissolved in milk. It is highly narcotic, producing in small doses, intoxication and delirium, for which purpose it is used in Kamtschatka.

From the account of Dr. Langsdorf, it appears that the inhabitants of the N. E. part of Asia use this variety in the same manner as wine, brandy, arrack, opium, &c., are by other nations. The fungi are collected in the hottest months, and hung up in the air by a string to dry; some dry of themselves on the ground and are far more narcotic. The usual mode of taking the fungus is to roll it up like a bolus, and swallow it without chewing; which the Kamtschatdales say would disorder the stomach. One large, or two small fungi is a common dose, to produce a pleasant intoxication for a whole day, particularly if water be drunk after it, which augments the narcotic principle. The desired effect comes on from one to two hours after taking the fungus. Giddiness and drunkenness result in the same manner as from wine or spirits; cheerful emotions of the mind are first produced, involuntary words and actions follow, and sometimes at last, an entire loss of consciousness. It renders some remarkably active, and proves highly stimulant to muscular exertion; by too large a dose, violent spasmodic effects are produced. So very exciting to the nervous system, in many individuals, is this fungus, that the effects are often very ludicrous; a person under its influence wishing to step over a straw, takes a stride, or a jump sufficient to clear the trunk of a tree; a talkative person cannot keep silence or secrets; and one fond of music is perpetually singing.

The most singular effect of the Amanita is the influence it possesses over the *urine*. It is said that from time immemorial the Kamtschatdales have known that the fungus imparts an intoxicating quality to that secretion, which continues for a considerable time after taking it. For instance, a man moderately intoxicated to-day, will by the next morning have slept himself sober; but (as is the custom) by taking a tea-cupful of his urine, he will be more powerfully intoxicated than he was the preceding day. It is, therefore, not uncommon for confirmed drunkards to preserve their urine as precious liquor, against a scarcity of the fungus. This intoxicating property of the urine is capable of being propagated; for every one who partakes of this intoxicating urine, has his own urine similarly affected. Thus, with a very few

Amanitæ, a party of drunkards may keep up their debauché for a week. Dr. Langsdorff mentions; that by means of the second person taking the urine of the first, the third that of the second, and so on, the intoxication may be propagated through five individuals.

The effects of this active principle of this and other fungi, viz., Amanatine appear to resemble considerably those of Opium.

It promises to prove homœopathic to delirium tremens. (11.) It was supposed that the northern hordes when they invaded the South of Europe were aided in their victories by its exciting effects.

Case 1.—Several French soldiers in Russia ate a large quantity of the *A.-muscaria* which they had mistaken for *A.-cæserea*. Some were not taken ill for six hours and upwards. Four of them, who were very powerful men, thought themselves safe, because while their companions were already suffering, they themselves felt perfectly well; and they refused to take emetics. In the evening, however, they began to complain of anxiety, a sense of suffocation, frequent fainting, burning thirst and violent gripes. The pulse became small and irregular, and the body bedewed with cold sweat; the lineaments of the countenance were singularly changed, the nose and lips acquiring a violet tint; they trembled much; the body swelled; and a profuse fetid diarrhœa supervened. The extremities soon became livid, and the pain of the abdomen intense; delirium ensued, and all four died. Several of their comrades were severely affected, but recovered. Two of these had weak pulse, tense and painful belly, partial cold sweats, fetid breath and stools. In the afternoon they became delirious, then comatose; the coma lasted twenty-four hours.

The symptoms of deep narcotism and violent irritation are generally observed.

Case 2.—In a case, related by Dr. Beck, where death was occasioned in seven hours by an infusion of *A.-muscaria* in milk, the brain was found very turgid; the whole sinuses of the dura-mater, as well as the arteries, were enormously distended with blood; the arachnoid and pia-mater were of a scarlet color; lastly, a clot of blood as big as a bean was found in the cerebellum.

It promises to prove homœopathic to congestion of the brain, and true hæmorrhagic apoplexy. (11.)

Case 3.—Orfila experimented on a dog: it produced trembling and weakness of the limbs, which continued for four hours, when the animal fell into a stupor, the respiration being slow and deep, and every now and then it uttered plaintive cries. It would roll itself on the earth, and occasionally shudder, as if under the influence of electricity. For the space of eight hours it had no evacuation; the exhibition of vinegar and Tartar-emetic only increased the symptoms. Olive oil induced vomiting and it recovered.

Case 4.—Giddiness for half an hour; dimness of sight; the patient thought he was enveloped in a huge flame; his hearing became painfully acute, and objects seemed confused to the eye; occasionally he felt a sensation of incontrollable gladness, which prompted him to

muscular movements, yet he was fully conscious that he was in a state of preternatural excitement.

Case 5.—A man, woman and child were in constant motion, either dancing or throwing themselves into grotesque attitudes; their countenances were expressive of the greatest hilarity; their consciousness was quite unclouded, and they exhibited the most lively indignation, when charged by their physicians with being drunk; their eyes glistened, the pupils were dilated, their tongues clear, and their breath untainted; they conversed without embarrassment.

Case 6.—A dog in six hours made efforts to vomit, became extremely weak, laid down and died in convulsions.

The stomach was found full of a *thick yellow mucus*; the stomach and duodenum had livid spots on their coats.

Case 7.—A dog had vomiting, trembling, and convulsive movements, accompanied with severe pain; in fact, all the symptoms of apoplexy declared themselves.

The stomach was touched with red spots, the mucous and muscular coats destroyed, and nothing remained except the serous tunic; hence it must have produced *gelatinous softening of the stomach*. (11.)

Case 8.—In four cases the body was livid, the blood fluid, abdomen distended with fetid air; the stomach and small bowels presented appearances of inflammation, passing over in some places into gangrene; in two cases, especially the stomach was gangrenous in many places; in these there was also *excessive enlargement of the liver*; the lungs were engorged and in some places inflamed or congested; the vessels of the brain turgid in some places. In one case the ileo-colic valve was much inflamed or reddened.

Case 9.—According to Noack and Trinks it is apt to produce an evacuation of frothy blackish, greenish matters, distention of the abdomen; stomach and bowels filled with very offensive gas, with traces of inflammation and gangrene upon their internal surface; inflammatory congestion near the pylorus; large gangrenous patches in the stomach and bowels; destruction of the mucous membrane of the small intestines in several places; blackish fluid in the stomach; *the liver unusually swollen*, the gall-bladder filled with thick, dark-colored bile.

Case 10.—Christison details the morbid appearances as follows: The body is in general very livid, and the blood fluid; so much so, that it sometimes flows from the natural openings of the body; the abdomen is distended with fetid air, which, indeed, is usually present during life; the stomach and bowels may present the appearance of inflammation passing in some places into gangrene; in two cases, the stomach was gangrenous in many places, and far advanced in putrefaction. The same appearances were found in the cases mentioned by Picco; in these there was also *an excessive enlargement of the liver*. The lungs have sometimes been found gorged or even inflamed; the vessels of the brain very turgid.

Case 11.—A boy was seized with delirium, a maniacal disposition to rave, and some convulsive movements. Ere long these symptoms

were succeeded by a state resembling coma, in every way, except that he looked as if he understood what was going on, and in point of fact, he really did so; he recovered speedily under the use of emetics.

Case 12.—A hard drinker, aged 73, drank an infusion of *Agaricus* in milk; he refused all medical assistance, but drank freely of fresh milk; he vomited eight or nine times, then had diarrhœa five times; he seemed stupefied, and only complained of nausea, which was relieved after each act of vomiting; he died in six hours.

Post-mortem.—Skin yellow; round pale red spots on body; pupils natural; abdomen somewhat distended; mucous and bloody froth from mouth; vessels of scalp congested; all the vessels of the brain filled with dissolved, dark-red blood; dura-mater and arachnoid quite red; the bloodvessels which penetrate between the convolutions of the brain, enormously distended with blood; the cortical substance of the brain much reddened, and the medullary substance marked with numerous bloody points from the size of a pin's head to that of a pea; one teaspoonful of bloody serum in each lateral ventricle; vessels at base of brain, especially the circle of Willis crowded with blood; tentorium cerebelli covered with a net-work of minute vessels; cerebellum unusually soft, with an extravasation of blood of the size of a pea in its *arbor-vitæ*.

Pleura, diaphragm and pericardium much reddened. Lungs much congested, blue and marbled, in state of splenization, and crowded with black blood. Heart filled with black fluid blood. Arch of the aorta much reddened.

Gall-bladder filled with much grass-green fluid bile; pharynx, œsophagus, trachea, omentum, pancreas, peritoneum, external surface of the stomach, and small bowels, and the internal surface of the bladder much reddened, and all the blood-vessels filled with black fluid blood. Internal coat of the stomach, duodenum, jejunum and colon of a scarlet red color; brownish red appearance of the base of the stomach and pylorus; two large excoriations in the fundus of the stomach and one in the duodenum; contraction of the cardiac and pyloric orifices

Traces of *Agaricus* were found in the chyme and chyle.

Case 13.—A little child, $1\frac{1}{4}$ years old, by some accident ate a small quantity of raw *Agaricus*, without being observed by its parents; after which it partook of some fresh milk, and then fell asleep immediately. This being the usual time for its sleep, the parents thought nothing of it; but when they found the child could not be awakened at the end of four or five hours past its usual time, they became alarmed, and medical assistance was sent for; the little child was found in an apparently lifeless, paralytic soporous condition; the eyelids half opened; the balls of the eyes distorted, pupils dilated, and insensible to light; face pale and puffy, with a blueish tinge about the eyes, nose and mouth; temperature of the body low; respiration unimpaired, pulse small and irregular; excretions stopped, the whole body paralyzed with only now and then a slight motion of the upper extremities; but still on pouring a small quantity of tepid milk into its

mouth. it would swallow; an emetic of Ipecac. was administered without any apparent effect, but emesis was effected, by tickling the fauces with a feather dipped in oil. After expelling some large pieces of the *Agaricus* from the stomach the child began to show more signs of life, the natural secretions gradually returned, and in the course of a few days it was restored to health again. (4.)

Antidotes.—It will be known that the noxious qualities of the most virulent species of *Agaricus* are communicated to brine, vinegar, &c.; the Olive-tree-agaric loses all its poisonous properties when salted, and becomes eatable; the pickle is thrown away. In fact two poisonous principles have been discovered in *Agaricus*, one of which is so volatile that it is dispelled by heat, or the act of drying, or by immersion in acids, alkalies, or alcohol; the other is more fixed and resists such processes. With the aid of these processes, especially in Poland and Russia, even those kinds of mushrooms which are elsewhere refused by common consent as poisonous, are eaten with perfect impunity, being extensively dried or pickled in salt or vinegar.

In poisoning with mushrooms, emetics and cathartics should be used; as vinegar dissolves out all the noxious principle it should be avoided; the strength must be sustained by mild tonics and stimulants; ether, and infusion of galls are particularly recommended.

Teste asserts that Camphor and Nitric-acid are antidotes to this drug.

Mr. Gerard has recently shown before a committee of the Paris Council of Health, that the poisonous mushrooms may be entirely deprived of their deleterious properties by being simply macerated and then boiled in water, to which a little vinegar has been added. The poisonous principle is perfectly soluble in water and is entirely removed. It is not soluble in alcohol except by virtue of the water which it may contain. This furnishes an important hint for the pharmaceutical preparation of the *Agaricus* and other fungi, in which the alcohol used should be as largely diluted with water as is consistent with its preserving powers.

GENERAL EFFECTS.

On the Nervous System.—*Nerves of sensation.*—It produces excessive sensitiveness to all external impressions; great sensibility of the skin, so that the slightest pressure produces intense and long-continued pains.

Clinical Remarks.—It seems to be homœopathic to a variety of nervous and hysterical affections, especially to spinal irritation, and those affections of the brain which simulate it. (11.)

Nerves of Motion.—It causes great liability to twitching of the muscles, irregular convulsive movements and desire to dance; also a curious state of the nervous system which becomes so acted upon by mental emotions, or the exercise of the will that muscular twitchings and convulsive movements are excited, a condition of body closely resembling that of a patient suffering from chorea and hysteria.

Clinical Remarks.—Noack recommends it in *mania saltatoria*, as

it is homœopathic to a state in which the slightest exertion of the will produces the most violent effect upon the over-sensitive nerves and muscles, and calls forth the most strange and almost unimaginable motions of the limbs; inclination to dance; the most curious motions of the hands; extraordinary agility of the limbs and extreme facility in the performance of the most fantastic motions.

In Chorea.—St. Vitus's dance has been denominated an insanity of the muscles, and is very analogous to mania-saltatoria. Agaricus is homœopathic to trembling of the limbs, subsultus, slight jerks of the muscles here and there; twisting about of the arms, persistent convulsed state of the muscles of the head and neck.

It is asserted by some physiologists, that the principal office of the cerebellum is to preside over and regulate the faculty of locomotion, and we have seen (see Case 12) that Agaricus acts specifically upon the cerebellum. (11.)

Agaricus is only homœopathic to the true nervous cerebral chorea, i. e. the most common form of it, or that which arises from a functional disease of the brain, and in which the convulsive movements cease during sleep. Nux and Ignatia are homœopathic to spinal-chorea, in which the spasmodic action does not cease during sleep, for the spinal-marrow does not sleep. Hydriodate of Potash, Iodine and Actea-racemosa are homœopathic to rheumatic chorea, which is apt to be attended with acute endo- or pericarditis. I have seen two instances in which chorea was attended with acute rheumatic inflammation of some of the structures of the heart. Agaricus may also prove homœopathic to that most dangerous and almost always fatal variety called *electrical-chorea* in which the convulsive movements finally give way to coma and the patient dies with apoplectic symptoms; venous congestion of the cerebral and spinal meninges appears to be the only uniform abnormal condition observed in electrical chorea. (11.)

Case.—A St. Vitus dance of five days' standing was not relieved by Bellad. ; Stramonium 6 helped a little; Ignatia not all; and thus three weeks passed by. Then Agaricus 6 was given and in six days there was some improvement; in ten days more there was a decided amendment; in ten days more the patient could walk; in thirty-four days from the commencement of the use of Agaricus the patient was well; it was given regularly every four hours. I have effected cures with the Tincture in one-fourth part of the above time. (11.)

In Cramps, Convulsions and Epilepsy.—It has long ago been recommended in the dominant school in epilepsy, especially in that variety induced by fright (Vogt, Dierbach), and is said to form the active part of Ragolo's secret remedy against this disease. (11.)

This remedy has been employed empirically for many centuries for the cure of epilepsy, and chronic enlargement and induration of the glands of the neck and throat. Teste considers its action to be somewhat similar to Belladonna and Lachesis, and prescribes it only after these remedies have failed.

In one case of hypertrophy of the brain, accompanied with almost constant tremblings of the limbs, the 3d dilution of *Agaricus* gave prompt relief. Another case of chattering of the jaws, and tremblings of the limbs, occurring during the debile stage of a typhoid fever, was speedily cured by this remedy. (10.)

On the Vascular System.—Like all the narcotic remedies *Agaricus* seems to act far more powerfully upon the venous than upon the arterial system. It seems to prevent the arterialization of the blood and render it more and more venous. It is more homœopathic to venous congestion than to inflammation. (11.)

On the Blood.—The body is in general livid, the blood fluid, so much so, that it sometimes flows from the natural openings of the body. All the vessels of the brain filled with dissolved, dark-red blood. Heart filled with black, fluid blood; all the blood-vessels filled with black, fluid blood.

On the Heart.—Heart filled with black, fluid blood. Pericardium and arch of aorta much reddened, i. e., stained with the fluid blood.

On the Pulse.—In one case the pulse became small and irregular and the body bedewed with cold sweat; in another the pulse was weak. Pulse small, quick, (80) slow, feeble, unequal, intermitting or undulating pulse.

Fever.—Constant chilliness, with inability to get warm. Violent shaking chills through the whole body, with normal temperature of the face, cold hands, without thirst and subsequent heat. Sensitiveness to cool air. General heat in the evening with redness of the cheeks, coldness of the hands and thirst; general heat at night intermingled with chilliness, followed by sweat; general heat in the afternoon with headache and thirst, followed by aggravation in the evening, attended with hurried breathing and great languor.

Clinical Remarks.—*Agaricus* ought to prove curative in some cases of intermittent fever; it may also prove useful in hectic fever, but its great affinity is for nervous fevers, typhus versatilis and delirium tremens. (11.)

Sleep.—Irresistible drowsiness in the day-time. Drowsiness especially after dinner; sleeplessness on account of pain and uneasiness in the legs. Sleep disturbed by desire to urinate with copious flow of urine, spasmodic cough, or coldness in the legs. Sleep interrupted by a multitude of dreams with fitful fancies, partly pleasant, partly unpleasant.

On the Mucous Membranes.—Many of the varieties of *Agaricus* cause the secretion of large quantities of *yellow mucus*. Thus, in a dog, poisoned with *Agaricus-bulbosus*, the stomach was found full of a thick yellow mucus; in another case the whole intestinal canal was filled with a thick yellow mucus; a woman evacuated an abundance of yellow mucus. (11.)

Skin.—Itching, burning and redness of various parts as if frozen. Miliary eruptions, close and whitish, with burning itching.

Clinical Remarks.—It is one of the most homœopathic and useful remedies against frost-bites.

LOCAL EFFECTS.

Mind and Disposition.—Want of disposition to talk. Irritable, vexed mood, ill-humor. Listlessness, aversion to any kind of work. Fearless frenzy with intoxication, accompanied with bold and vindictive designs. Menacing mischievous rage, with great strength. Vividness of the imagination, ecstasy, prophesying, making verses, singing, &c.

Clinical Remarks.—It is one of the most homœopathic remedies against acute delirium, mania, delirium-tremens, the delirium of typhus, &c.; it should be borne in mind when Belladonna and other remedies fail. (11.)

Sensorium.—Vertigo of various kind, especially early in the morning as if intoxicated. Dullness of the head and dull pain as after intoxication; dizziness, intoxication and stupefaction; staggering to and fro, especially during a walk in the open air. Dizziness as if he would fall, with staggering and dimness of sight, coming on in paroxysms every five minutes.

Clinical Remarks.—It is one of the most homœopathic remedies against chronic dizziness resulting from frequent intoxication, or habitual free use of strong liquors; in dizziness from congestion of the brain, with threatening of apoplexy, especially in the staidous, sluggish, or intemperate in eating and drinking. (11.)

Headache.—Great weight in the head, especially in the forehead and temples; in the morning, as after intoxication. Drawing pain in the head. Tearing in the head.

PATHOLOGY.—Vessels of the brain very turgid; all the sinuses of the dura-mater, as well as the arteries enormously distended with blood; the arachnoid and pia-mater of a scarlet color; clot of blood as large as a bean in the cerebellum.

Clinical Remarks.—It is most homœopathic to the headaches of persons subject to nervous twitchings and St. Vitus's dance, or to spinal irritation with great soreness, uneasiness and weakness down the spine, with or without derangement or enlargement of the liver. (11.)

Also in the headaches of those who use wine and spirits too freely, or who become delirious whenever they are feverish or in pain, attended with twitchings, startings, grimaces and a state resembling pleasant intoxication. (11.)

According to Black it is indicated in nervous and congestive headaches in which fulness, sleepiness, and frequent inclination to yawn are present attended with relaxation and soreness of the whole body, pain in the back and a feeling as if all the joints were dislocated. Hence it would also seem suited to the headache and general derangement which attends influenza.

It is homœopathic to congestion of the head, with pulsation in all the vessels, redness and heat of the face, and delirium. Also to *cattarrhal* headache with aching in the forehead over the eyes, drawing pain in the forehead, extending to the root of the nose, rending pain in the forehead above the root of the nose, as if the brain were lacerated, with burning pain in the nose and eyes, great dryness of the nose, profuse epistaxis and abundant discharge of thick viscid nasal mucus, followed by frequent dropping of water from the nose. I have used it frequently and successfully against many varieties of headache in nervous and hysterical persons. (11.)

Scalp.—Painful sensitiveness of the scalp as of subcutaneous ulceration. Itching of the hairy scalp.

Clinical Remarks.—It is homœopathic to headaches attended with or followed by great soreness or tenderness of the scalp; and against chronic tenderness of the scalp, such as occurs in persons with spinal irritation. (11.)

Eyes.—Pressure in the eyes. Burning sensation in the eyes. Twitching of the eye-balls and lids. A viscid, yellow humor glues the eye-lids to one another. Short-sightedness, and dim-sightedness of both eyes. Yellowness of the eyes. Twitching of the eye-lids. Falling out of the eye-brows.

Clinical Remarks.—It is homœopathic to spasmodic twitching of the eye-lids and winking, such as occurs in nervous, verminous, or scrofulous children; to chronic inflammation of the meibomian glands; to short-sightedness and dim-sightedness of both eyes; to *muscæ volitantes* from disorder of the watery spectrum, when everything seems as if obscured by turbid water; to incipient amaurosis when black motes hover before the eyes, or everything seems surrounded by a mist, or covered with a cobweb. (11.)

Ears.—Itching redness, and burning of the ears, as if they had been frozen.

Clinical Remarks.—It is homœopathic to nervous pains in the ears; but especially against the pains, itchings and other inconveniences which attend frost-bites of the ears. (11.)

Nose.—In blowing the nose, blood comes out of it, early in the morning, immediately after rising from the bed; this is followed by violent bleeding from the nose. Sense of smell very acute.

Clinical Remarks.—It is homœopathic to epistaxis and frost bites of the nose; also to great sensitiveness and tenderness of the nose, with or without great acuteness of the sense of smell. (11.)

Face.—Redness of the face, with itching and burning, as if frozen.

Bluish appearance about the eyes, nose and mouth. Pale, bloated face. Unnatural physiognomy.

Clinical Remarks.—It is homœopathic to frost bites of the face; to throbbings and twitchings in the face, such as attend gum-

boils, and abscesses about the face ; it is useful against the pimples of acne which occur on the faces of young persons, and a tendency to blueness and roughness of the skin of the face ; also to chaps and fissures of the lips. (11.)

Jaws and Teeth.—Violent tearing in the right side of the lower jaw.

Clinical Remarks.—It is homœopathic to neuralgia of the face ; to toothache from taking cold, especially when the teeth feel long and are very sensitive to pressure, when touched or while chewing ; to inflammation of the lining membrane of the alveolar processes. (11.)

Mouth.—Swelling of the gums. Tongue is coated white and yellow. Foul smell from the mouth. Small painful ulcers at the side of the frænum of the tongue ; aphthæ in the mouth ; salivation.

Clinical Remarks.—It is homœopathic to mercurial salivation ; also to ulceration and soreness of the mouth from gastric and bilious derangement ; and to a foul and bilious state of the mouth. (11.)

Taste and Appetite.—A good deal of hunger, but no appetite. Morbid appetite, burning thirst. Flat, or bitter taste in the mouth, with yellow coating of the tongue. Great fickleness of the appetite ; want of appetite may be followed for several days in succession by sudden fits of hunger, and ravenous appetite ; then eating is followed by choking in the throat, oppression of the stomach, pain in the eyeballs, general dullness and heaviness.

Clinical Remarks.—It is very homœopathic to bilious dyspepsia, especially when occurring in very nervous and sensitive persons. (11.)

Gastric Symptoms and Stomach.—Frequent rising of mere air. Hicough, eructations, and nausea. Eructations with qualmishness of the stomach ; nausea relieved by eructations. *Oppression* of the stomach, with inclination to go to stool ; or about the pyloric orifice ; or extending up into the chest. Cramps of the stomach with pains towards the spine, shoulder-blades or collar-bones.

PATHOLOGY.—Two large excoriations in the fundus of the stomach and one in the duodenum.

Stomach full of thick yellow mucus.

Stomach and intestines distended with foul, stinking air. Traces of mortification in numerous places on the mucous membrane. Congestion of mucous membrane near the pyloric orifice of the stomach. Fluid of black color in the stomach. The stomach studded with red spots ; the mucous and muscular coats destroyed, so that nothing remained except the serous tunic (*gelatinous softening*.)

Clinical Remarks.—*Agaricus* is one of the most homœopathic remedies against excessive flatulence of the stomach and bowels ; against the fulness, oppression of the stomach which arises from flatulence, and produces the feeling as if the contents of the chest were compressed. It is most suited against the flatulence of nervous, hysterical and bilious persons. (11.)

Abdomen.—Pinching below the umbilicus, attended with a bloated condition of the abdomen. Emission of a large quantity of wind, smelling like garlic, with smarting pain in the rectum. Pressure and sense of fulness in the abdomen even after a light meal; troublesome fulness in the whole abdomen, making sitting and breathing difficult; bloating of the abdomen. Cutting pain attended with the shifting to and fro of wind in the bowels, with bloating of the hypogastrium; eructations and emissions of wind give but slight relief. Cutting pains in the abdomen followed by liquid stools. Shifting of flatulence in the abdomen and loud rumbling.

PATHOLOGY.—Omentum, pancreas, peritonæum, external surface of stomach and small bowels much reddened, and all the blood-vessels filled with black fluid blood. Stomach and intestines distended with foul stinking air; traces of mortification in numerous places on the mucous membrane. Mucous membrane of the small intestines destroyed in various places. Ileo-colic valve much inflamed or reddened.

Clinical Remarks.—*Agaricus* is one of the most homœopathic remedies to excessive flatulence and tendency to diarrhœa, such as occur in nervous and hysterical persons, especially if there be marked bilious derangement; also in indigestion, colic and flatulence from irritation or sub-acute inflammation of the stomach and bowels (chronic gastro-enteritis), (11.)

Liver and Spleen.—Aching pains in the right and left hypochondriæ in the regions of the liver and spleen. Acute pulsative pain below the left hypochondrium extending up as high as the third or fourth rib. Dull pressure in the spleen in the evening while lying in bed. *Stitches under the short ribs of the left side, in the region of the spleen. Sharp stitches in the region of the liver.* Dull stitches in the region of the liver, increased during inspiration.

PATHOLOGY.—*Excessive enlargement of the liver.* Evacuation of frothy black and greenish bile. Gall-bladder filled with thick dark-colored bile. Gall-bladder filled with much grass-green fluid bile.

Clinical Remarks.—*Agaricus* is one of the few homœopathic remedies against enlargement of the liver and spleen and all the attendant gastric, bilious and intestinal derangements. Against general abdominal and venous plethora. (11.)

Stool and Anus.—The stool is at first hard and knotty, afterwards it becomes loose, and lastly diarrhœic. The diarrhœic stools are accompanied with pinching and cutting in the abdomen and emission of a quantity of flatulence. Watery stools with cutting pains and fermentation in the bowels. Liquid or slimy yellow diarrhœic stools. Profuse fetid diarrhœa, with swelling of the abdomen. Fetid breath and stools, with tense and painful belly. Stomach and bowels filled with very offensive gas.

Clinical Remarks.—It is homœopathic to bilious diarrhœa, especially when attended with much and excessively fetid flatulence,

viz., when there is yellowness of the skin, and whites of the eyes and tongue, bitter taste in the mouth, nausea, eructations, pain, tenderness and fulness in the region of the liver and spleen, great rumbling in and distension of the abdomen. It is peculiarly suitable when these symptoms are associated with much nervousness. It may prove useful in gastro-enteritis and peritonitis; also in ulceration of the stomach and bowels, especially that which obtains in typhoid fever. (11.)

Urinary Organs.—Clear lemon-colored urine, or reddish and scanty.

Pains and stitches in the region of the kidneys and in the loins. Frequent urging to urinate with copious discharge, followed by scanty urine and difficult emission, the stream being slow and feeble or intermittent, or the urine coming out in drops only.

Discharge of viscid tenacious mucus from the urethra, with tingling, itching and burning in the orifice.

PATHOLOGY.—Internal surface of the bladder much reddened.

Clinical Remarks.—This remedy may prove useful in many affections of the kidneys, bladder and urethra, as we have indubitable proofs that it is conveyed to these parts. (See page 157.)

Sexual Organs.—Frequent and continued erections. Increased inclination for sexual intercourse, also without erections. Involuntary emissions. Excessive itching of the genital organs. Profuse menstruation.

Clinical Remarks.—It probably acts upon the genital organs in the same manner as spirituous liquors. It is homœopathic to excessive itching of these parts and profuse menstruation. (11.)

Air Passages.—We have already noticed the tendency of *Agaricus* to excite the secretion of large quantities of yellow mucus from the stomach and bowels. The *Agaricus-catarrh* is characterized by a copious discharge of thick tenacious mucus from the nose, followed or preceded by an accumulation of dry mucus in the nostrils, as if they were entirely filled with it; frequent sneezing. Roughness of the throat, *frequent hawking* with discharge of small balls of phlegm; frequent irritation in the trachea with inclination to cough; dry cough. Shortness of breath and *asthma*, frequently obliging one to stand still while walking; labored breathing, as if the chest were filled with blood; *violent oppression of the chest*, preventing deep breathing, with sensation as if the breath were constricted. Paroxysms of anxiety in the chest, and sense of suffocation. Stitches in the lungs. Itching and burning of the breast and nipples, with eruption of pimples. Profuse sweat upon the chest.

PATHOLOGY.—The lungs engorged and in some places inflamed and congested. Pleura, diaphragm and pericardium much reddened. Lungs much congested, blue and marbled, in a state of splenization and crowded with black blood. Arch of aorta much reddened.

Clinical Remarks.—*Agaricus* promises to be one of our most valuable remedies in congestion of the lungs, in congestive asthma,

especially when these disorders occur in bilious and nervous persons. It ought to prove an admirable remedy against derangement of the heart when associated with great enlargement of the liver, and secondary congestion of the lungs, with all the attendant difficulty of breathing, palpitations, spasmodic cough, derangement and congestion of the kidneys. It may ward off many cases of ascites and hydrothorax arising from primary congestion and enlargement of the liver. (11.)

Back, Sacral Region.—Pain as if sprained and bruised in the back, and nape of the neck, when lying down and sitting still. Lameness and painful weakness of the dorsal muscles, especially of the loins, increased by standing or walking. Violent pain in the small of the back, when rising from a seat, rendering it difficult to move the legs or raise the body. Cramp-like drawing pain in the back, extending to the œsophagus.

Clinical Remarks.—The powerful action of *Agaricus* upon the motor nerves and muscles has already been alluded to (see p. p. 157 and 159). It is one of the most useful remedies in spinal irritation and lumbago. Many cases of so-called nervous headaches are merely extensions of spinal irritation to the ramifications of the spinal nerves within the brain. KER has used it successfully when there were violent oppressive pains, principally in the forehead, often attended with delirium, vomiting of a bitter bilious fluid, sense of languor, feeling as if the body were bruised and joints dislocated, with a sense of uneasiness and weakness all down the spine. (11.)

Upper Limbs.—Rheumatic pains in the arms. Trembling of the hands. Burning of the fingers, with itching and redness, as if frozen. Painful feeling of weakness, tired in the arms.

Clinical Remarks.—It is homœopathic to many those of anomalous pains in the limbs which arise from spinal irritation. It is one of the best remedies against frost-bites of the fingers, and that peculiar mottled purplish state of the skin, owing to a fluidity and venous condition of the blood, which so easily leads to chilblains and frost-bites.

Lower Limbs.—Painful and excessive weariness and weakness of the thighs and legs, especially when sitting. Tearing in the limbs. Stinging in the leg. Itching, burning, and redness of the toes, as if frozen.

Clinical Remarks.—(See upper limbs.)

General Symptoms.—Great debility, languor, trembling, convulsions, epilepsy.

Tearing pain, especially in the articulations, during rest. Extreme sensitiveness of the whole body. Convulsive twitchings here and there, unnatural movements of the upper extremities; constant convulsive condition of the head and muscles of the neck. Inclination to dance, extreme agility of motion. Symptoms which appear diagonally, changing from side to side, viz., in the right upper arm and in the left leg, or in the right arm and left knee-joint, or first in the right, then in the left thigh.

AGNUS - CASTUS.

CHASTE-TREE.

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GENERAL REMARKS.

According to Hooper this plant is called *Agnus* on account of the down on its surface which bears some resemblance to that on a lamb-skin; and *Castus*, because the chaste matrons at the feast of Ceres, strewed it upon their beds in order to repress carnal desires. It bears the German name of Keuschlamm, i. e. Chaste- or Chastity-tree.

This bush, which is very common all along the coast of the Mediterranean, is cultivated in some gardens on account of the elegant shape of its lanceolate leaves and particularly on account of its beautiful flowers of a violet blue color, and growing in clusters. The fruit consists of small blackish berries, which, by their shape, consistence and smarting taste, resemble Cayenne-pepper, whence the French name *petit-poivre*, *poivre de moine*, &c. (30.)

The seeds, when fresh, have a fragrant smell and an acrid aromatic taste, and formerly had such a celebrity for their anaphrodisiac powers, that they were used by the monks in order to enable them better to keep their vows of chastity, whence they received the common name of monk's-pepper. They and the Syrup of *Agnus-castus* which were used by the monks in the middle ages fell into disrepute because some evil-disposed persons attributed very opposite effects to them. They were replaced by the Syrup of *Nymphaea* which has also fallen into disuse. (30.)

Dioscorides says it increases the flow of milk, brings on the menses, thins the spermatic fluid, produces pain in the testicles and brings on sleep. He recommends the seeds against poisonous stings, dropsy, and enlargement and disease of the spleen; a decoction of the leaves and seeds, in a bath, in inflammations and other diseases of the womb. An ointment of it will remove pain in the testicles. It is said to be useful in lethargy and phrensy when applied to the head. It was thought to cure the bites of serpents; to remove hardness of the genital organs; fissures of the anus, bruises and wounds. It is said that a twig of it held in the hand, when walking, will prevent any excoriation. (65.)

Hippocrates recommended the leaves steeped in wine against metrorrhagia; with wine and oil to expel the after-birth; the seeds in diseases of the spleen; also against ascarides; to increase the secretion of milk in nursing women; the fresh leaves to be put on inflamed organs; and plasters of the same for ulcers. (65.)

Roth says it has cured : Whiteness of the tongue, bitterness of the mouth, loss of appetite, sensitiveness of the abdomen to pressure, swelling of the abdomen after eating, occasional pains in the lower abdomen, and in the kidneys while urinating, great accumulation of wind in the bowels, hardness of the stools and redness and muddiness of the urine.

Also when the menses last from ten to eighteen days, being preceded by headache, vertigo, and dimness of sight, accompanied with pains in the pelvis and loins.

Also oppression of the chest on going up-stairs, cough with raising of blood, followed by copious mucous expectoration, with paroxysmal attacks, especially in the morning, attended with palpitations and bleeding of the nose.

When there is a deficient secretion of milk in child-bed women, when the legs are much fatigued and swollen towards evening, with sallowness of the skin and disturbed dreams.

It has cured quartan fevers of six months' duration, marked by slight chilliness towards evening, followed by heat and headache, without thirst, but with slight delirium, the paroxysm terminating in profuse perspiration.

According to the Homœopathists, the spirit of the action of this drug may be expressed by stating that it produces a condition which counterfeits marvellously that which obtains in old age, marked by dullness of the intellect, weakness of memory and hearing, bleary-eyedness, trembling and feebleness of the limbs, decay of the sexual appetite and power, suppression of the menses and secretion of milk, and prevalence of urinary and arthritic complaints. It is also homœopathic to that premature old age which arises in young persons from abuse of the sexual powers, marked by melancholy, apathy, mental distraction, self-contempt, general debility, frequent loss of prostatic fluid, &c. (11.)

GENERAL EFFECTS.

On the Nervous System.—*Nerves of motion.*—It seems to exert a more decided action upon the motor nerves and upon the muscles and joints than upon the nerves of sensation.

On the Vascular System.—Chilliness without thirst or subsequent heat. Constant trembling of the whole body from internal chilliness, the body feeling warm to the touch. Chilliness of the whole body, without thirst, although the hands are the only portions of the body which feel cold to the touch. Frequent alternations of chilliness and heat without thirst. Heat of the whole body, with coldness of the knees.

Clinical Remarks.—Roth says it has cured quartan fevers of six months' duration, when characterized by slight chilliness towards evening, followed by heat and headache, without thirst, but with slight delirium, the paroxysms terminating with profuse perspirations. It

may prove useful against the spleen-affections and dropsy which follow quartan fevers. (11.)

Pulse.—The pulse is apt to become slower and less perceptible, 60 per minute.

Skin.—This remedy is especially remarkable for the sensation of *corrosive itching* which it produces in various parts, without its being attended with any marked eruption. It is homœopathic to corrosive itching upon the scalp, especially in the evening; also upon the forehead and eye-brows, in the eyes and upon the lids, about the tip of the nose, upon the cheeks, about the ears and chin; itching and scratching sensation in the throat, with irritation to cough; about the groins, perinæum, genitalia and arm-pits. (11.)

Clinical Remarks.—It may prove a useful remedy against pruritus and prurigo. It had an ancient reputation against itching of the anus.

LOCAL EFFECTS.

Mind and Disposition.—Melancholy. She is very sad, and she keeps repeating that she will die soon.

Clinical Remarks.—Noack recommends it in hypochondriacal melancholy, melancholia anoa, melancholia tedium vitæ. It is homœopathic to great mental dejection with fear of approaching death; despair and melancholic undervaluing of one's self, with desire to be dead; melancholic hypochondriacal humor, with dissatisfaction with one's-self and contemptuous undervaluing of everything; thoughtlessness and inability to work; difficult comprehension of what has been read and heard; great mental anxiety with excessive debility and feeling as if diarrhœa were about to occur; excessive mental distraction while reading. It is said to be very useful in purely hysterical and hypochondriacal affections bordering upon fixed melancholy, not depending upon any dyscratic or material cause, but rather upon a misdirection of the mental powers, and occurring in old maids, widows and widowers. It is allied to Ignatia and Aurum in its action; and while Agaricus produces great excitement of the nervous system, Agnus-castus causes great torpor. (11.)

Head.—Headache in the upper part of the head, as from staying in a room filled with a thick and smoky atmosphere.

Clinical Remarks.—Noack proposes it in hemicrania. It is homœopathic to *tearing* pains, especially above the right eye and temple, as if one had received a blow upon the eye, attended with soreness to touch, increased by motion, aggravated in the evening, and lasting for several days. It is probably best suited to the headaches of persons with derangements of the womb, ovaries, testicles or sexual organs in general; in the headaches of those given to sexual excesses or subject to seminal emissions, or of those of unmarried persons suffering from nervous debility. (11.)

Sleep.—Confused dreams. Soporose drowsiness; confusion of the head and drowsiness.

Clinical Remarks.—Noack proposes it as a remedy against *coma*; it is probably most suitable against the drowsiness which arises from nervous exhaustion, rather than from congestion. It may be suited against hydrocephaloid drowsiness. (11.)

Scalp.—Corrosive itching in several portions of the hairy scalp; stinging-itching of the scalp relieved by scratching; corrosive itching in the lower part of the forehead, in the region of the eyebrows and in the upper lids.

Clinical Remarks.—It seems to be a very suitable remedy against pruritus and prurigo; it is not so much indicated against any particular form of eruption as against a peculiar and severe corrosive itching. (11.)

Eyes.—Dilated pupils the whole day. Smarting-stinging in the eyeball, and corrosive itching under the eyes, with lachrymation.

Clinical Remarks.—It is homœopathic to affections of the head, when attended with dilatation of the pupils. It may be used against great irritation of the eyes and lids. (11.)

Ears.—Ringing in the ears, and roaring. Corrosive itching about the ears; considerable heat in the ears, with hardness of hearing.

Clinical Remarks.—It may prove homœopathic against deafness, noises and pains which arise from prurigo about the ears. (11.)

Nose.—Illusion of smell, so that one imagines that he smells herings or musk. Corrosive itching of the tip of the nose.

Clinical Remarks.—It is homœopathic to prurigo about the nose; and to illusions of hearing and smell.

Jaws and Teeth.—Deep tearing in the right ramus of the lower jaw, below the sockets. Corrosive itching near the chin. Pains in the teeth excited by warm food or drink. Ulcers on the gums.

Clinical Remarks.—It may prove homœopathic to rheumatic neuralgia, toothache and face-ache; also to ulceration of the gums. (11.)

Gastric Symptoms.—Hunger and appetite are very urgent. He relishes his food, but it does not agree with him; it makes him feel uneasy and full. Eructations; the wind which he belches and that which he passes per anum smells like old urine in clothes.

Great dryness of the mouth, with such viscosity of the saliva that it can be drawn out in strings. Redness of the veil of the palate and the uvula, with scratching in the throat which obliges him to cough, but the phlegm which he raises is so very viscid that it hangs like a piece of cloth in the throat. Ulceration of the mouth.

Clinical Remarks.—It is homœopathic to pharyngitis; also to the formation of an excess of uric-acid in the stomach. It is a singular coincidence that *Agnus-castus* has been supposed to exert a specific influence upon the spleen, and Scherer has found uric-acid in considerable quantity as a normal constituent in the juice of the spleen. (11.)

Abdomen.—Shifting of flatulence, pressing and cutting in the epigastrium.

Clinical Remarks.—It may prove useful in some forms of dyspepsia and flatulence. Roth says it is homœopathic against whiteness of the tongue, bitterness of the mouth, loss of appetite, sensitiveness of the abdomen to pressure, swelling of the abdomen after eating, occasional pains in the hypogastrium, great accumulation of wind in the bowels, hardness of the stools, pains in the kidneys, and redness and muddiness of the urine. (11.)

Liver and Spleen.—Hard pressure in the region of the liver.

Clinical Remarks.—Dioscorides recommended it against dropsy, ascites, enlargement and other diseases of the spleen. Hippocrates recommended the seeds in diseases of the spleen. (11.)

Stool and Anus.—Loose stools, some days in succession. Difficulty in passing the stools, which were not hard; they had to be pressed out, and seemed inclined to re-enter the rectum. Discharge of prostatic fluid when pressing at stool. Corrosive itching about the anus and perinæum.

Clinical Remarks.—It has been recommended by Noack in chronic diarrhœa. In pruritus podicis and excoriations about the rectum; it is homœopathic to corrosive itching about the groins, anus and perinæum; to acute, deep sharp stitches about the coccyx; to painful spots near the anus while walking, as if there were subcutaneous ulcerations. It has been recommended against fissures of the anus; and it has been said that a twig of it held in the hand while walking will prevent any excoriation between the thighs, and of the feet. It has also been recommended against ascarides. (11.)

Urinary Organs.—Disagreeable sensation in the back part of the urethra, after micturition. Frequent urination, the urine being copious and dark. Pain in the kidneys; redness and muddiness of the urine.

Clinical Remarks.—It may prove useful against the uric-acid diathesis; and also against the Oxalic-acid diathesis, as the recent experiments of Wöhler and Frerichs in which the introduction of uric-acid into the organism by the *primæ-viæ* or by the veins, was followed by an augmentation of the urea and oxalate of lime in the urine, afford tolerably strong evidence that the uric-acid in the animal organism undergoes a decomposition into urea and oxalic-acid precisely similar to that which can be artificially produced by Peroxide of Lead. It may prove useful against the melancholy and despondency which attends the oxalic-acid diathesis. (11.)

Genital Organs.—Feeble erections, without the sexual desire being excited. The penis is so relaxed that not even voluptuous fancies excite it. Diminution and slowness of the sexual powers, which are usually very easily and powerfully excited; the penis is small and flaccid (in a very healthy man.)

Drawing along the spermatic cord. The semen runs out in a stream, without ejaculation, it has but little smell, and is scanty.

To prevent getting children, a man took for three months, morning and evening twelve grains of the *Agnus-castus*, by which the parts were weakened to such an extent that not only did the erections become deficient, but he lost his semen as he intended, and never begat children. A kind of yellow gonorrhœa. This drug has received the Greek name *Lygon* from the great flaccidity of the penis which it causes.

Clinical Remarks.—Dr. Landerer of Athens uses the seeds of the *Agnus-castus* with the greatest success in gonorrhœa, curing cases in which even Cubebs had failed. Although it is said to thin the spermatic fluid and produce pain in the testicles, still an ointment of it will remove pains in the testicles. (11.)

In impotence arising from a paralytic condition of the muscles connected with the genital organs, *Agnus* is a remedy of great value. We usually prescribe it at the sixth dilution. (10.)

Female Sexual Organs.—*Clinical Remarks.*—Dioscorides says it increases the flow of milk and brings on the menses; a decoction of the leaves and seeds in a bath is said to relieve inflammation and other diseases of the womb, and to remove hardness of the womb, testicles and ovaries. Hippocrates recommended the leaves steeped in wine against metrorrhagia; with wine and oil to expel the after-birth. Roth recommends it when the menses last from ten to eighteen days, and are preceded by headache, vertigo, and dimness of sight, and accompanied with pains in the loins and pelvis. When there is a deficient secretion of milk in lying-in women, the legs becoming much fatigued and swollen towards evening, with sallowness of the skin and disturbed dreams. (11.)

It has often cured incontinence of urine following tedious *accouchements*. Also in relaxed conditions of the utero-genital organs, it has been successfully employed. (10.)

Respiratory Organs.—A good deal of sneezing, with dryness of the nose; tenacious mucus in the throat which it is difficult to bring up.

Clinical Remarks.—Roth says it is useful against oppression of the chest on going up-stairs, cough with raising of blood, followed by copious mucous expectoration, with paroxysmal attacks, especially in the morning, attended with palpitations and bleeding of the nose. (11.)

Upper Extremities.—Hard pressure in the right axilla increased by pressure. Hard pressure in the upper arm, increased by contact; pressure, lameness, and jerking pain in the elbow, wrist, metacarpal bones, worse on motion.

Clinical Remarks.—Noack has recommended it against the after-effects of dislocations. It is homœopathic to piercing and rending pains in the joints; pains as if from dislocation of the joints, especially in the shoulder joints; paralytic pain in the wrist-joint, only felt when turning the hand; gouty rending pain with swelling of the finger-joints; lassitude and tiredness of the limbs, increased by every motion.

It will also probably prove useful against gonorrhœal-rheumatism. It had an ancient reputation against bruises and wounds. (11.)

Lower Extremities.—Lameness, jerking, drawing, sticking pain in various parts of the lower extremities. Heaviness of the right foot; sensation as if a heavy load were attached to the tarsal bones, drawing the foot down, in any position of the foot. Tearing in the anterior joints of the left toes, more violent when walking.

Clinical Remarks.—It is homœopathic to piercing, aching, rending, and luxation-pain in the hip-joints; piercing, drawing and dislocation-pain in the knee-joints; weakness of the ankles, with predisposition to sprain them. (11.)

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ACUTE EFFECTS.

According to Christison, authors who have treated of the actions of alcoholic and spirituous liquors on man, have distinguished three degrees in its immediate effects.

1) When the dose is small, much excitement and little subsequent depression are produced.

2) In the second degree the symptoms are more violent, excitement, flushed face, confusion of thought, delirium and various mental affections, varying with individual character. The majority of intoxicated persons become jovial, sympathetic and even indiscreet; many things which otherwise would remain a profound secret, are allowed to escape (*in vino veritas*); others become sentimental and affectionate; some speak with incomprehensible suavity about learned subjects, politics, country; in some cases the coward becomes a hero in his own imagination; others are always ready to quarrel or fight, and either comport themselves as pugilists, or become almost murderous in their ferocity, but fortunately there are generally others not less drunk who are not only peaceable, but anxious to preserve the peace. Another class of drunkards always become depressed in spirits, sit quietly in a corner, are much absorbed in themselves and burst into tears and complaints over the most trivial occurrences. The perceptions are disturbed and often confused; the harmony between the intellect and will is broken up; the higher intellectual functions and even the common processes of the understanding become more and more difficult, while the imagination and the lower impulses predominate. (9.)

These symptoms are followed by dozing and gradually increasing somnolency, which may at length become so deep as not easily to be

broken. After the state of somnolency has continued several hours, it ceases gradually, but is followed by giddiness, weakness, stupidity, headache, sickness and vomiting.

This degree of injury from Alcohol may prove fatal, either in itself by the coma becoming deeper and deeper,—or from the previous excited state of the circulation causing diseases of the brain in a predisposed habit. There is a singular variety in the principal symptoms in this form of intoxication, even when completely formed: thus, when the stage of stupor is fully formed, the person is sometimes capable of being roused, sometimes immoveably comatose for a long time;—the pulse is sometimes imperceptible or very feeble, sometimes distinct, or even full, generally slow or natural, seldom frequent, very seldom firm—the pupils are occasionally contracted, much more generally dilated, and in a few instances alternating between one state and the other—the countenance is commonly pale, sometimes turgid and flushed—the breathing is for the most part slow and also soft, yet not unfrequently laborious, but very rarely stertorous. Convulsions are rare, having been observed twice only in twenty-six cases. Neither do any of the special symptoms seem to bear a marked relation to the ultimate event; for many cases get well when the pupils are much dilated, the coma profound and the pulse imperceptible. It usually happens that if the stage of stupor be completely overcome, recovery speedily ensues, without any particular symptom except headache, giddiness, sickness, and the customary consequences of a debauch. But on some occasions the comatose stage is succeeded by one which indicates much cerebral excitement—by flushed face, injected eyes, restlessness, a febrile state of the system, and delirium even of the violent kind. *In other cases this affection puts on very much the characters of a slight attack of typhoid fever.* (9.)

In another variety of this *second* degree of intoxication, an apoplectic disposition is called into action by the excited state of the circulating system, and death ensues from apoplexy, or some other disease of the brain, rather than from simple drunkenness. Thus, in some instances, extravasation of blood is found within the head after death; but as this is a rare effect of intoxication, it must be considered as *the result of poisoning with spirits, exciting sanguineous apoplexy* in a predisposed constitution. In other cases the stupor of intoxication, after putting on all the characters of apoplexy for two days and upwards, terminates fatally without extravasation; here the poison operates by developing a constitutional tendency to congestive apoplexy. In some cases an interval of returning health occurs between the immediate narcotic effects of the poison and the ultimate apoplectic coma, which is the occasion of death. (9.)

Case 1.—Two brothers drank in half an hour, three bottles of porter in which twenty-four ounces of whiskey had been secretly mixed by a companion. In fifteen minutes after, one of them fell down insensible, and had no recollection of what happened for twelve hours; but he recovered. The other staggered a considerable distance for an

hour, and then became quite insensible and unable to stand. In four hours more, consciousness and sensibility were quite extinct, the breathing stertorous and irregular, the pulse eighty and feeble, the pupils dilated and not contractile, and deglutition impossible. He died in fifteen hours. (9.)

Case 2.—A man drank thirty-two ounces of rum one afternoon and was comatose most of the ensuing night; on the next morning, though very drowsy, he was sensible when roused; and in the evening he was considered convalescent; but two days afterwards he became delirious, and in two days more he died comatose, and congestion was the only appearance found in the brain. (9.)

Case 3.—A workman after drinking eight ounces of rectified spirits by mistake for water, suddenly fell down senseless and motionless and remained so for eleven hours; he then began to recover and came round so far that he returned to his work next morning; after this he continued to pass dark, pitch-like evacuations. In three weeks he became drowsy, mistook one thing for another, answered questions sluggishly, and had a frequent pulse and dilated sluggish pupils; in which state he continued for three weeks more. (9.)

Case 4.—A boy, aged eight years, took eight ounces of gin; he suddenly became motionless and insensible; in no long time he vomited; he was now motionless, insensible, pale and cold; the pupils were contracted, the pulse feeble and hurried, the breathing stertorous and slow; and he made ineffectual efforts to vomit; stimulants of all kinds had little or no effect on him for one-and-a-half days, when the breathing became more natural and his look quite intelligent; yet he could not answer questions, exhibited no sign of volition, and had a pulse as frequent as one hundred and sixty; in twenty-four hours more the breathing became laborious and rattling, and the lips livid; death occurred on the third day. The only morbid appearances of any note were: general injection of the arachnoid, and effusion of frothy mucus into the bronchial tubes. (9.)

Case 5.—A boy aged seven, took nearly five ounces of undiluted whiskey; he suffered for two days from the ordinary symptoms of excessive intoxication, which were then immediately followed by epileptic convulsions; these continued to recur with more or less violence, but always frequently, for two months. (9.)

As a general rule the symptoms in the second degree of intoxication are remarkably uniform, gradual and uninterrupted. But there are likewise some anomalies. Thus, occasionally after the phenomena of ordinary intoxication have gone on gradually increasing without having attained a very great height, sudden lethargy supervenes at once, and may prove fatal with singular rapidity. (9.)

Case 6.—A man reached his home in a state of reeling drunkenness, but able to speak and give an indistinct account of himself; he then became lethargic and died in twenty minutes. There was no morbid appearance except some watery effusion on the surface of the brain and in the ventricles. (9.)

An anomaly of a different kind is sudden supervention of deep insurmountable stupor, without the usual precursory symptoms, yet not till after a considerable interval subsequent to drinking.

Case 7.—A lad aged sixteen, swallowed sixteen ounces of whiskey in the course of ten minutes, and pursuant to the terms of a wager, walked up and down a room for half an hour. He then went into the open air, apparently not at all the worse for his feat, but in a very few minutes, while in the act of putting his hand into his pocket to take out some money, he became so suddenly senseless as to forget to withdraw his hand, and so insensible that his companions could not rouse him. He died in sixteen hours. (9.)

3) The third degree of poisoning is not so often witnessed, because in order to produce it, a greater quantity of spirits must be swallowed pure and at once, than is usually taken, except by persons who have made foolish wagers on their prowess in drinking. Then there is seldom much preliminary excitement; coma approaches in a few minutes and soon becomes profound, as in apoplexy; the face is sometimes livid, more generally ghastly pale; the breathing stertorous and the breath having a spirituous odor; the pupils sometimes much contracted, more commonly dilated and insensible; and if relief is not speedily procured, death takes place, generally in a few hours, and sometimes immediately. The patient may recover if the iris remains contractile; but if it is dilated and motionless on the approach of sight, recovery is very improbable. These cases generally die with the symptoms of pure coma; convulsions are not common, but occasional cases do occur in which the coma is accompanied with alternating opisthotonos, and emprostotonos. (9.)

Occasionally Alcohol acts as an irritant; after its ordinary narcotic action passes off, another set of symptoms occasionally appear, which indicate inflammation of the alimentary canal.

Case 8.—A young man had been drinking brandy immoderately for several days, when at length he was attacked with shivering, nausea, feverishness, pain in the stomach, vomiting of every thing swallowed except cold water, thirst, and at last hiccough, delirium, jaundice, and convulsions; death took place on the ninth day. The stomach was found gangrenous over the whole villous coat; the colon was much inflamed and all the small intestines red. (9.)

DELIRIUM TREMENS.

By some physicians, this disease is considered to be a form of alcoholic poisoning, or an alcoholism; that it is specific in its nature, and that it is analogous to Plumbism, Mercurialism, Ergotism or Narcotism. These physicians consider it as an entirely erroneous opinion, that the privation of an accustomed stimulus is the exciting cause of the malady.

A larger class of practitioners regard it as the delirious affection, which follows the suspension of the habitual use of stimulants. They

make its essential character consist in the cerebral debility consequent upon the cessation of an accustomed excitement, although they admit a complication with the immediate effects of the stimulant in those cases which arise after a protracted debauch, when drinks finally became disgusting or can no longer be tolerated. The symptoms of morbid cerebral excitement proceeding from the direct agency of the alcohol, now become mingled with those resulting from a withdrawal of the stimulus. (11.)

The symptoms of delirium tremens vary from the most trifling degree of tremor, wakefulness and delirium, accompanied with hallucinations and quickened pulse, to the highest degree of nervous depression and muscular and cerebral excitement.

The *first* stage usually presents the following symptoms, and very generally in the following order.—A peculiar slowness of the pulse, attended with coldness of the hands and feet, which being generally bedewed with moisture, and from the effect of evaporation present a clammy, icy sensation. These are preceded and accompanied with symptoms of general debility, and usually a diminution of temperature, cramps in the muscles of the extremities, with giddiness, nausea, and occasionally actual vomiting; the bowels are sometimes open, sometimes the reverse; nervous tremors of the hands and tongue, especially of the latter, which is mostly moist and but slightly furred. These symptoms are accompanied with a dejection or depression of the mind, which is sometimes extreme, accompanied with frequent sighing and oppression, or sense of sinking at the præcordial region, anxiety and depressed state of the countenance, with short and disturbed slumbers. (13.)

The *second* stage comes on with a marked increase of many of the symptoms above mentioned, the countenance of the patient assuming gradually a wild and more anxious expression; he soon begins to have various mental illusions, or hallucinations; he imagines that he sees loathsome and disagreeable objects, which constantly annoy and trouble him, and which he will attempt to catch with his hands, supposing they are upon his bed. He suffers from increased restlessness, is excessively talkative, in fact in some cases the garrulity is extreme, and most commonly on the subject of his delusions. He is more sleepless, and at times absolutely so; so that by some writers this per-vigilium is considered as pathognomonic of this stage of the disease. The temperature of the surface of the body may increase, while that of the feet and hands remains cold and clammy as before. The general restlessness and hurry of manner increases; the tongue is more coated with fur, and it is now so tremulous, that the patient cannot hold it still when protruded from the mouth. The urine at this time is usually scanty; the pulse is mostly frequent, above 100, and sometimes considerably so. The pupils are usually contracted, but he does not complain of intolerance of light, nor during the course of the disease does he complain of any pain about him; and frequently when interrogated by his physician or his friends, will reply sharply that

he is quite well, that there is nothing the matter with him. After these symptoms have continued two or three days, and the case is about to terminate favorably, the gradual mitigation of the above symptoms is usually attended with yawning and drowsiness, with evident disposition to sleep; and this, as soon as it thoroughly seizes the patient, is frequently very deep or profound, lasting sometimes 6, 8 or 12, 14 or 18 or even 20 hours; and in most cases is so completely critical, that it appears as it were to resolve, or almost to terminate the disease. (13.)

Of such cases as terminate favorably this critical sleep may be said to constitute the *third* stage of the attack. But if on the other hand, the disease should take an unfavorable turn, the general symptoms increase in violence; the mind of the patient labors under excessive irritability; he makes frequent and violent struggles; there is more evident depression of the muscular, nervous and vascular systems; the pulse becomes quick, smaller and weaker; the tremor, too, affects nearly all the limbs; the patient is constantly talking or muttering to himself; the delirium increases in intensity; sometimes he dies in an attack of convulsions, and sometimes death is preceded by a subsidence of the general symptoms. (13.)

CHRONIC EFFECTS.

(*Chronic Delirium Tremens.*)

The name of *Alcoholismus-chronicus* is given to those groups of nervous symptoms, which affecting alike the motor and sensorial powers and the intellectual faculties of the individual affected proceed generally in a slow and chronic course, and are not to be referred directly to any lesion of the nervous system appreciable during life, or discoverable on post-mortem examination. Such symptoms are to be met with in persons, who have long taken ardent spirits in excess. For the first six or eight years after giving way to this pernicious custom the health may be in no wise impaired; but after the lapse of eight or ten years addiction to dram-drinking, sometimes to such an extent as to produce intoxication, but more generally without the patient being seriously affected, the symptoms may begin to show themselves, especially if he has had one or several attacks of delirium tremens, neglects to take his ordinary meals, and rarely takes any solid food except when he takes a morsel or two with each dram of raw spirits that he swallows. (34.)

Dyspeptic symptoms will now appear; the hands will tremble much, especially in the mornings, but subsequently these tremors will continue throughout the day, and are increased by exertion, while the bodily powers are much diminished. Unfortunately nothing will overcome this nervous debility so effectually as an additional glass of spirits.

Next, he may complain of a peculiar sensation, as if a veil were suddenly passed before his eyes; this will occur chiefly in the morn-

ing, though it may be experienced likewise during the day, if the eyes are strained by looking fixedly at any object.

Next the speech will become indistinct during the early part of the day, from a peculiar tremulous motion of the tongue.

Sleep then becomes broken by frightful dreams, and often before falling asleep a creeping sensation will be experienced beneath the skin of the feet and legs, with spasms and cramps in the calves of the legs and other parts. Gradually these formications will be felt also during the day, becoming more urgent and painful, and causing an indescribable restlessness in the patient; shooting upwards to the nates, and then extending to the hands and arms. The patient often complains that he feels as if small ants or other insects were making their way beneath the skin. The tremors will now increase in the hands and arms, he will shuffle in his gait, especially when he first attempts to move forwards. The muscular power of the extremities will be found much diminished; the want of it being most felt when any unusual exertion is required. The knees will frequently give way, and when the patient attempts to grasp any thing it will slip from between his fingers. Gradually the weakness of the limbs becomes more apparent, and it extends upwards to the muscles of the trunk, so that at length he can neither stand or sit, but is obliged to remain constantly in a recumbent position. (34.)

While this is taking place, the sensibility of the skin, hitherto unaltered, will begin likewise to diminish, first in the points of the fingers and toes, and subsequently over the backs of the hands and feet, to the forearms and legs. Ultimately the toes and legs may become insensible; the same may occur in the fingers and forearms, but less completely, and at a later period.

Along with these symptoms, there may be more or less vertigo, sometimes merely to the extent of a sudden and transitory darkness before the eyes, but at other times he may fall immediately to the ground, if he does not lay hold of some object near him.

Hallucinations of various kinds now come on, particularly in the evening and before falling asleep, and these fantasies often banish sleep altogether. They vary much in character, but the patient often imagines that he sees persons or objects around him, and occasionally hears voices and laughter. The pupils during this time are dilated and less sensible to light than usual. (34.)

After appropriate treatment and abstaining from spirituous liquors, health may be in great part restored, and the patient remain comparatively well as long as he observes a regular course of life and takes his ordinary meals.

If he relapses into his former habits, the digestive functions will be more affected than formerly; there will be frequent vomiting of tough acid mucus, with a sense of weight and distention at the epigastrium after taking food; emaciation will set in and the skin assume a dirty yellowish hue.

Soon the formications and muscular debility will return, not alone,

but accompanied with painful cramps and startings in the feet and calves of the legs. These startings resemble those produced by electric shocks; at times they are only momentary, but often are more prolonged. Soon they will extend to other parts of the body and become more like convulsions, under the influence of which the patient occasionally becomes insensible. Gradually these convulsions will increase in severity till they form complete epileptic seizures of daily occurrence, often followed by delirium and hallucinations. Vision will become imperfect, the letters of a book when the patient attempts to read, seem to run together into an illegible mass. The powers of thought and memory are likewise totally diminished. (34.)

Some improvement may still take place under medical treatment, but it will only be for a short time; new symptoms will show themselves in the shape of pains in the legs, which are most severe in the afternoon, but which cease entirely at times, especially in the morning. Even when these pains are least severe, the patient still experiences a certain degree of restlessness in the legs, so that he continually moves them up and down in bed. When the pains are at their height, it feels as if the flesh were torn or cut with knives. The strength will daily decline; diarrhœa come on; the skin assume the appearance of parchment; he becomes fearfully emaciated, lies in a condition of low muttering delirium and finally dies. (34.)

There is great similarity between many of the symptoms of poisoning with the salts of *lead*, and those of *Alcoholismus-chronicus*. But in lead-poisoning there is the very characteristic appearance of the blue circle upon the gums and likewise the attacks of colic, which, with but few exceptions, precede the other symptoms and are never met with in *Alcoholismus-chronicus*. Again, in patients suffering under lead-poisoning the breath has a peculiar and most nauseous smell, while the skin is of a dusky grey color, easily distinguishable from the yellow hue of habitual spirit-drinkers. In lead poisoning also, we do not meet with the symptoms of chronic gastro-enteritis, or of hepatic affections, such as constantly accompany alcoholismus, while the latter is frequently preceded by one or more attacks of delirium tremens. It is not possible, however, to draw a line of distinction between paresis and anæsthesia-saturnina, and paresis and anæsthesia-alcoholica, or between the epileptic seizures and convulsions which may occur in both disorders. (34.)

There is also some difficulty in distinguishing *Alcoholismus-chronicus* from *chronic cases of arsenical poisoning*. The tremors observed in slow poisoning with Arsenic are not relieved by a dose of Alcohol, nor are they more severe in the mornings than at other times, and they are generally accompanied by spinal pain and irritation. But, perhaps, the most marked distinction is to be found in the mental condition of the patient. In the more advanced stages of *Alcoholismus-chronicus* the mind seldom or never remains unimpaired; vertigo, tinnitus-aurium, muscæ-volitantes and dilated pupils, with hallucinations and delirium are constantly present; while these symptoms are rarely or never seen in arsenical poisoning. (34.)

Mercurial fumes produce similar symptoms, but mercurial tremors are generally preceded by the specific action of this metal upon the gums, the teeth are often loosened in their sockets and salivation occurs; but the mental faculties remain intact, and vertigo, scotomata and hallucinations are very seldom observed. In chronic-alcoholismus, loss of power of the limbs and tremors appear before any pain is felt in the affected members. In mercurial poisoning pain is one of the earliest symptoms; the tremors produced by mercury are also much more severe and obstinate than those which result from Alcohol.

In chronic poisoning with the fumes of *Phosphorus*, formications, tremors and muscular debility occur, but cerebral symptoms rarely happen. (34.)

In chronic poisoning with *Secale-cornutum* the symptoms are sometimes so closely allied to those of alcoholismus that they cannot easily be distinguished. But in poisoning by *Secale*, the symptoms are much more rapidly developed; they commence with severe pain in the stomach, and are accompanied with colic and jerking and convulsive movements of the limbs, followed by paralysis and anæsthesia, though the brain is generally unaffected, and the skin does not assume the characteristic yellow hue. (34.)

Besides the comparatively well known effects of certain vegetable and mineral poisons upon the system, certain stages and conditions of various chronic disorders occasionally present a striking resemblance to the phenomena of Alcoholismus-chronicus. This is particularly the case in *Paralysie generale des alienes*.

In short the symptoms of Alcoholismus-chronicus are closely allied to those of chronic poisoning in general.

ON ANIMALS.

Huss and Dahlstrom administered daily to three dogs of various ages, but of nearly equal size, six ounces of Swedish brandy.

Intoxication, canine appetite and intense thirst were occasioned by each dose during the first three months; but the dogs continued fat and apparently well.

In the fourth month the bark of the animals became hoarse, they had a hoarse, dry hiccough and cough, the eyes were staring and full of tears, hearing was much diminished, and their sleep became restless with frequent subsultus and jerking of the limbs.

After the completion of the fourth month the dogs trembled when they attempted to stand, their walk was shuffling and there was evident weakness of the extremities, especially in the hind legs, so that they often remained in a sitting posture while taking food. Cramps and convulsive movements and subsultus next appeared in the limbs and trunk, both during sleep and when the animals were awake and lying on their sides. The sight of other dogs, however, roused them at all times from their apathetic condition, and they endeavored even in the weakened state to attack and bite them. Their strength

diminished more and more, the sensibility of the skin, especially of the ears was remarkably lessened, the appetite fell off rapidly, but the irritability towards other dogs continued unabated to the last. The deposit of fat rather increased. They all died in the eighth month.

Post-mortems.—The appearances were the same in all three; the stomach was contracted, its mucous membrane lead-colored and œdematous; the intestinal canal coated with a tough bad smelling mucus; the liver considerably enlarged, softened and dark; the bile dark and so tough that it could be drawn out in threads; nasal, tracheal and bronchial mucous membrane slightly inflamed; vessels of the brain and its membranes much congested, with effusion of clear serum between the arachnoid and dura-mater; a clear, gelatinous semi-coagulated fluid between the same membranes of the spinal-cord, especially near the fourth and sixth dorsal vertebræ; muscles pale, relaxed and soft; fat, soft. (34.)

GENERAL EFFECTS.

On the Nervous System.—Alcohol has been generally believed, since the experiments of Sir B. Brodie to act on the brain through the medium of the nerves, and to do so without entering the blood. But we agree with Christison, who says this may be doubted, as it does not act so swiftly, but that absorption may easily take place before its operation begins. It is probable that alcohol exerts a simular action upon many of the nerves to that which it does upon the brain; congestion, serous effusion about, and induration of the nerves are not improbable effects. (11.)

Nerves of Motion.—We have already seen that Alcohol rarely causes convulsions; but it exerts some influence over the nerves of motion, for intoxicated persons do not possess full control over the voluntary muscles, as is seen in their stammering speech, the staggering to and fro, and tendency to fall. In delirium tremens also, there are peculiar tremors, particularly of the tongue and hands.

Trembling of the hands and arms; a constant trembling or trembling motion of the muscles under the skin (*tremblement vermiculaire*). Shaking and shivering, are only higher degrees of trembling and only occur when the muscular system is much weakened. Diminished strength and a state of weakness and relaxation of the locomotive muscular system. Partial paralysis. Subsultus, jerking and spasmodic drawing and starting of the muscles. Convulsions and epileptic attacks.

Clinical Remarks.—Alcohol is homœopathic to many nervous spasms, to the subsultus occurring in low fevers, to great muscular debility, paralysis-agitans, &c. (11.)

Nerves of Sensation.—Formication in or under the skin is one of the most common chronic effects of Alcohol in the nerves of sensation; it is frequently attended with restlessness which obliges the patient to move the affected limbs constantly. Fleeting sensations of draw-

ing or piercing, generally in the feet and legs. Hyperæsthesia, pain and neuralgic rendings; these are generally preceded for some time by formication, flying pains and piercings. These may be followed by dullness of sensation, or even loss of sensation, or anæsthesia; it is noticed first in the tips of the toes, then in those of the fingers, finally it extends over the back of the foot to the leg, or tibia, or to the back of the hands.

Clinical Remarks.—Alcohol may prove homœopathic to some forms of neuralgia and paralysis of sensation; these seem to be antagonistic disorders, but changes of structure in the nerves are frequently attended with pains or spasms, and when these changes are completed paralysis of sensation or motion will follow. (11.)

Great Sympathetic Nerve:—The chronic action of Alcohol upon this nerve and its ramifications are evidenced more by alterations in the structure and functions of the various organs of the chest, abdomen and pelvis than by any peculiar sensations.

In small quantities Alcohol expands its action almost exclusively upon the abdominal organs. One can distinctly feel how its action expands from the solar-plexus upon those organs in which the splanchnic nerves ramify. There is a feeling of comfort in the abdomen, more rapid and powerful digestion, more active peristaltic movements, increased desire for food and drinks, more profuse secretions, especially from the kidneys.

ON THE VASCULAR SYSTEM.

On the Blood:—Through whatever channel Alcohol operates, there is no doubt that it enters the blood; for in man the breath has a strong smell of spirits for a considerable time after it is swallowed; and it has been found in the tissues and secretions after death from large doses.

One of the most important appearances in poisoning with Alcohol is the fluid and venous condition of the blood. According to Steinheimer and Ræsch Alcohol acts directly on the blood, and intoxication is owing to an alcoholic venous plethora, in which the proportion of hydrogen and carbon in the blood is much increased. A similar alteration of the blood occurs in poisoning with narcotic drugs, and the delirium and excitement of the nervous system produced by them and Alcohol is secondary to this change in the quality of the blood.

If Alcohol be added to blood which has been drawn from a vein, the blood becomes dark, it loses its normal opacity, becomes more or less transparent, and changes to a cherry-juice-like fluid. With the aid of a microscope we see the blood globules gradually losing their red coloring matter, which becomes uniformly dissolved and diffused through the serum, which then assumes a peculiar cherry-red color. This serum coagulates to the consistence of thick milk, but cannot form solid coagulæ, and no watery particles separate from it. These appearances coincide with those of the blood of toppers, which is thick but

fluid; it coagulates very loosely, contains little fibrin, but much albumen and fat. (11.)

According to C. H. Schultz, when Alcohol is absorbed into the blood, it renders the coloring matter of blood globules soluble in the blood-plasma, and produces a contraction of the walls of the blood globules.

The quantity of fat in the blood of topers is considerably increased, it may increase to 11 per-cent. according to Lecanu. The blood often seems milky or curdy.

According to Moleschott Alcohol burns off in the blood, or forms a combination with the oxygen of the blood, and is converted into carbonic acid and water; this prevents the oxygen of the blood from combining with the organic mass, thus stopping its oxygenation and combustion and retarding the normal and constant metamorphosis of the tissues; hence it occasions a lesser demand for food and solid nourishment.

Dr. Ogston has furnished the most positive proofs of the absorption of Alcohol into the blood. He says: that Alcohol will escape by the kidneys unchanged, is proved by the fact that it can be tested chemically in the urine. This he has verified in several cases of death by drowning. That this fluid, however, could be found in the urine in any but the minutest quantities, and in a highly diluted state, he did not consider at all likely till the following occurrence showed its possibility.

Case 9.—A man aged 47, while intoxicated, threw himself in the water; the body was recovered in less than an hour and inspected fourteen hours after death. At the inspection, from three to four drachms of urine from the bladder was being heated in an iron spoon over the flame of a candle, to ascertain if it contained albumen, when the flame set fire to the vapor rising from the fluid. This unexpected event was witnessed by Dr. James Jameson, and several medical students.

Dr. Christison says Alcohol may also be in some cases detected in the tissues and secretions of the body; not only has a spirituous odor been remarked in the brain, but the fluid in the ventricles has had both the smell and taste of liquor. Dr. Percy found that in animals poisoned with Alcoholic fluids, as well as in the case of some men, alcohol could be detected, generally in the urine, and also in the brain, by cautious distillation, and removing the water from the distilled fluid by means of dry carbonate of Potass. Dr. Percy gave Christison an opportunity of verifying his results on the brain of a man, and there was no difficulty in obtaining from a few ounces of brain a sufficiency of Alcohol to exhibit its combustion on asbestos repeatedly.

According to Huss the blood of dram-drinkers is impregnated with a foreign substance (Alcohol); this passes directly from the stomach and intestines into the blood; a part of the spirit is perhaps then decomposed, but another portion is carried directly by the portal system

through the liver and from thence to the lungs, where much is exhaled with the air that is breathed, but the remainder passes into the arterial system and from thence over the whole body.

In all cases of Alcoholismus-chronicus the blood contains a much larger proportion of oily and fatty particles than in health; and these were even visible to the naked eye, both in the arterial and in the venous system.

All authors are agreed that the blood of dram-drinkers contains a much larger proportion of carbon than that of healthy individuals. Scharlau has estimated the excess of carbon in the blood of drunkards to be not less than 30 per-cent.

Huss comes to the conclusion, that both the arterial and venous blood of dram-drinkers is loaded with *fat*; that it is impregnated likewise with Alcohol; that the solid constituents in defibrinated blood are diminished, as is likewise the proportion of blood-globules.

As long as the dram-drinker's appetite and digestion remain good the patient remains stout and plump, but as soon as the digestive organs fail and the appetite diminishes, while the craving for brandy is increased, the fat deposited in the cellular tissue is re-absorbed and emaciation begins. As this progresses the patient becomes generally cachectic, the serum is augmented, the proportion of blood globules is diminished, and the blood when drawn shows less and less disposition to consolidate. Still even in such cases Huss has detected oil-globules in the blood of both sides of the heart.

Böcker thinks that Alcohol causes a decidedly venous condition of the blood, with a proclivity towards melanosis. Also that it produces a partial solution of the coloring-matter of the blood in the plasma, rendering the serum reddish and turbid.

The blood in five drunkards, contained :

	in 1000 parts.	Health.
Solid constituents of defibrinated blood	202.180.	221.000.
Blood globules	122.484.	141.100.
Albumen	76.804.	69.400.
Extractive matters and soluble salts of serum	12.594.	6.800.
Fibrin	2.200.	2.200.

Hence Alcohol diminishes the solid constituents, and the blood globules; increases the quantity of albumen, fat, and extractive matters; and exerts little or no influence upon the fibrin.

Clinical Remarks.—Alcohol is evidently suited against some dyscrasias and blood-diseases. It is homœopathic to adiposis and venosis; more or less antagonistic to tuberculosis.

In tuberculosis there is a deficiency of fat in the system, which Alcohol may supply, especially if aided by fatty food, cream, cod-liver-oil, &c.; there is an excess of albumen which Alcohol may increase; there is a deficiency of iron and the chlorides of soda and potassa which Alcohol cannot supply. Hence Alcohol alone may prevent tuberculosis, but cannot entirely cure it when fully developed;

it may require the aid of cod-liver oil, iron, and chlorides of soda and potassa. (11.)

In this connection we may be permitted to add: that the morbid condition of the blood produced by the malaria or poison of intermittent fever, is totally distinct from the morbid condition of the blood which attends tuberculosis. As far as chemical analysis goes, the facts show that the state of the blood in confirmed and aggravated intermittent fever is the very antithesis of the state of the blood in tuberculosis in several important particulars; and more especially, that *the proportion of albumen is greatly diminished*, while that of the red corpuscles is uniformly and to a very considerable extent increased; two circumstances which are in direct opposition to the state of the blood in tuberculosis.

The blood of four persons residing in malarious districts and suffering from intermittent fever, was analyzed by Cozzi; the following are the results:

	1	2.	3.	4.	Average.
Water and salts	737.67.	705.49.	732.45.	809.17.	746.19.
Fibrine	2.20.	2.06.	2.29.	1.96.	2.12.
Fat	15.	21.	13.	16.	16.
Albumen	48.71.	56.61.	47.59.	53.10.	51.50.
Blood corpuscles	211.27.	235.63.	217.54.	135.61.	200.01.

	Tuberculosis.	Fever and Ague.	Health.
Water	798.021.	746.19.	791.378.
Fibrin	2.776.	2.12.	2.952.
Fat	1.554.	16.	3.240.
Albumen	88.144.	51.50.	70.501.
Blood globules	114.794.	200.01.	127.426.

Hence it is evident that fever and ague diminishes the quantity of fat and albumen and increases that of the blood-globules. Hence a residence in a fever and aguish atmosphere in order to cure tuberculosis must be assisted by fatty food, cod-liver oil, alcohol, iron and the chlorides of soda and potassa. (11.)

Heart and Arteries.—In strong, but not excessive doses, a feeling of warmth and comfort spreads from the epigastrium over the whole body; the pulse becomes raised, more powerful and quicker; all the muscular movements take place with more ease, power, and endurance; the tone of the nervous-system is raised, especially in the brain, followed by greater vivacity, excitement of the feelings and courage, and more general and astute powers of thought. The metamorphosis of the tissues takes place more rapidly, followed by increased secretions, especially from the skin and kidneys.

In a few hours this state is followed by relaxation and exhaustion, tiredness, inclination to repose and sleep.

PATHOLOGY.—In the seventy cases examined by Drs. Peters, Goldsmith and Moses, the heart was always flabby, somewhat enlarged, dilated, but little or not at all thickened, and its external surface

loaded with fat. Fluid, dark, cherry-juice-like blood was often found in both ventricles, and in the aorta and pulmonary arteries. Coagulæ were rarely or never found in the heart or large blood-vessels. (11.)

In *Ogsten's* cases, the walls of the heart were loaded with fat in eleven cases, coincident with general obesity in three cases. There was general enlargement, or hypertrophy in eleven cases, coincident with abundant fat on its walls in five cases. Hypertrophy of the left ventricle in five cases; dilatation and attenuation of the right ventricle in nine cases. The tricuspid valve was diseased in four cases, the mitral in eight, and the aortic in two.

There was dilatation of the aorta in four cases; bony plates and atheroma in four cases.

There were abnormal appearances in the pericardium, heart and aorta, in thirty cases out of 73, or in 41 per-cent.

The changes in the heart and arteries to be met with in drunkards in such numbers, are attributed by Dr. Carpenter, partly to the gouty and rheumatic diatheses generated in such persons by alcoholic fluids, and in part to the direct action of the poison introduced into the blood; but more particularly, with the exception of the increase of fat about the heart, by the exposure to inclement weather from which drunkards so frequently suffer.

Clinical Remarks.—Alcohol is homœopathic to a fatty state of the heart, and adiposis in general. Chambers has been in the habit of forbidding tea, coffee and alcohol to obese persons with striking advantage; and he thinks that good effects have followed their disuse in cases of thickened heart in muscular subjects. (11.)

It is also homœopathic to many of the symptoms of *typhoid fever*; yet Tweedie gives the following summary of cases, or stages of fever in which stimulants prove beneficial. (44.)

1) It is sometimes observed that when a patient in fever has been going on favorably, the pulse becomes suddenly soft and compressible, the skin cool and damp, accompanied by a feeling of considerable exhaustion. With these symptoms there need be little hesitation in allowing six or eight ounces of wine in twenty-four hours, at proper intervals.

2) When the symptoms denoting sensorial disturbance, languor, low muttering delirium, *tremor*, or subsultus progressively increase, if at the same time, the patient lose his strength from day to day, the pulse be soft and the skin cool, wine may be safely prescribed.

3) When the fever assumes the petechial character more especially if the spots be large and of a dark or livid hue, wine is indicated.

4) In cases of sudden and unexpected collapse.

5) Dr. Graves considers that wine and opium may be sometimes advantageously prescribed in the advanced stages of fever, even when particular symptoms apparently render their propriety doubtful;—thus when the tongue is coated with dry, brown fur, the teeth covered with sordes, when there is suffusion of the eyes, dry and hot skin, heat of scalp and flushing of the face, a low form of delirium, sense of

weight or pain in the head, not of an acute or throbbing character, and the pulse small, rapid and thrilling, wine may be given with advantage. (11.)

LOCAL EFFECTS.

Head.—Hallucinations and congestion of the head occur as a matter of course; they do not require explanation. Melancholy with inclination to suicide (*Monomanie suicide ebrieuse*) is not an uncommon effect of chronic alcoholism; also mania with inclination to commit murder (*Monomanie homicide ebrieuse*;) mania with inclination to incendiarism (*Monomanie incendiarie, pyromanie ebrieuse*;) mania with excessive inclination to drink; (*Monomanie d'ivresse; polidipsia, Omomania*) this is not a fault, but a disease, and must be treated as such, with the aid of nurses, attendants, medicines, &c.; the liabilities to relapse are as frequent and obstinate as those of mania and fever and ague, and must be guarded against as sedulously. Stupidity, (*Stupidité ebrieuse*;) maniacal or drunken ferocity, (*Manie, ou Ferosité ebrieuse*;) this is most common in those of hasty and passionate temperaments; dementia (*Demence ebrieuse*.)

PATHOLOGY.—In the bodies of nearly seventy drunkards examined by Drs. Peters, Middleton Goldsmith and Moses, in 1842 and 43, there was invariably more or less congestion of the scalp, and of the membranes of the brain, with considerable serous effusion under the arachnoid. The substance of the brain was unusually white and firm, as if it had lain in Alcohol for an hour or two. The ventricles were generally nearly or quite empty. In not more than eight or ten cases were there more red spots on the cut surface of the brain than normal. The peculiar firmness of the brain was noticed several times, even when decomposition of the rest of the body had made considerable advances; typhus-fever is the only disease, except induration of the brain, in which a like firmness is often observed. Occasionally a few drachms of colorless, or reddish turbid serum were found in the ventricles of the brain. (11.)

In ten cases of fatal delirium tremens, the membranes of the brain were congested in four; an excess of fluid was found under the arachnoid in eight; an excess of fluid in the ventricles in six; and in the majority of cases the substance of the brain was "wet."

In seventy-three cases examined by Dr. Ogston the *dura-mater* was adherent to the calvarium in eleven; highly injected in four; much thickened (leathery) in one; serum between it and skull-cap, in one.

The *arachnoid* was thickened in thirty-one cases; serum under it and over the cerebral hemispheres in forty (coincident with arachnoid thickening in thirty;) serum at base of skull, in seventeen; between the *dura-mater* and arachnoid, in two; in the cerebral ventricles in twenty-four, viz., in some quantity in fourteen, and limited to these in four.

The *pia-mater* was injected in twenty cases, very minutely in nineteen; limited to the base of the brain, in two; the surface was figured, in one; coincident with ventricular effusion in fourteen; with effusion at the base of the brain, in nine; a quantity of serum under the *pia-mater* in one case. (18.)

The *brain* was hypertrophied in two cases; *indurated* in twenty-six, very much so in ten; indurated coincidently with sub-arachnoid serum in twenty-one; with abundant ventricular serum in five; with lymph on portions of the brain in three; with softened fornix in one. The brain was softened in four cases. There was œdema at its base in five; coincident with injection of the *pia-mater*.

The *cerebellum* was softened in six cases, coincident with softened cerebrum in three, with indurated brain, in one. The *cerebellum* was indurated in eight cases, coincidently with induration of the brain in all.

The *medulla oblongata* and *spinal cord* were indurated in one case, coincidently with induration of the brain and *cerebellum*.

The *choroid plexuses* had vesicles upon them in fourteen cases.

The *cerebral arteries* were in a state of fatty degeneration in one case.

There were abnormal appearances in the brain and appendages in 89 per-cent.

Clinical Remarks.—Alcohol is homœopathic to many forms of congestion of the brain, insanity, dropsy of the brain, especially the hydrocephaloid disease, induration of the brain, &c.

In many cases of typhoid fevers, and other maladies characterized by cerebral disturbance, and depression of nervous energy, Alcohol is a specific remedy of great value. How often do we meet with groups of symptoms during the course of scarlatina, typhoid and other fevers which simulate those of alcoholic intoxication! Like Opium, it impresses specifically the brain (*tubercula quadrigemina* particularly) and nervous system; and the phenomena which arise from its use bear a close resemblance to those of this drug. (10.)

Eyes.—A blood-shot condition or congestion of the eyes, with a bilious condition of these organs, are among the most common effects of even moderate quantities of Alcohol.

Hallucinations of sight are common both in simple intoxication, delirium tremens and alcoholismus-chronicus. The patient sees double, or thinks he sees a variety of objects, men, animals, good or bad spirits, angels or demons.

Optical illusions are among the most uniform and singular effects of the abuse of Alcohol. This probably arises from the fact that the most marked action of this stimulus is upon that portion of the brain which gives origin to the optic nerves.

Ears.—Singing in the ears, or rushing and roaring noises are not uncommon; hallucinations of hearing are also not uncommon, such as imaginary voices, talking, or shouting; in chronic alcoholismus

they are not constant, but occur most frequently in the evening and about midnight; the patient may even imagine that he hears singing, or instrumental music. (4.)

Clinical Remarks.—Ringing in the ears, which has arisen from mere debility, from excessive loss of blood, &c., is often cured by the judicious employment of alcoholic stimulants. (10.)

Nose.—Hallucinations of smell are not common; but the patient may imagine that his room is full of the vapors of Sulphur, or suppose that the devil has defiled his bed, and that this smells as the devil is supposed to do. (4.)

Mouth, Taste.—Great dryness of the mouth is a common effect of Alcohol, although the tongue is commonly moist in delirium tremens. Hallucinations of taste sometimes occur in alcoholismus-chronicus, and the patient may suppose that all the drinks which are offered him taste more or less of Alcohol. (4.)

Clinical Remarks.—The excessive dryness of the mouth and tongue which so often accompany typhoid and malignant fevers, is sometimes materially diminished by the use of brandy or wine. When other phenomena correspond, such as delirium, optical hallucinations, depression of the nervous system, &c., Alcohol is homœopathically indicated, and should be prescribed without hesitation. (10.)

Stomach.—Derangements of the stomach are very common in drunkards; among the chronic effects the most frequent is vomiting, viz., the well known *morning-nausea and vomiting*. At first the throat seems full of mucus, which is hawked up with difficulty; this becomes more and more difficult, and finally inclination to vomit and actual vomiting occur, caused at first by the attempts to hawk up phlegm, but finally they occur without this, and are attended with a feeling of oppression, discomfort, tension and aching in the epigastrium. Besides the morning-vomiting, these symptoms may also occur more or less frequently during the day, especially after eating and drinking. These gaggings or vomitings of drunkards are preceded for a longer or shorter time by a feeling of pressure or tension below the breast, by fullness and distension after eating, by sour or putrid eructations, rising of water in the mouth, &c. In the morning a tough, or sour or bitter, or saltish or insipid water is raised; during the day, the food, more or less altered or digested, is brought up, but the vomits are always more or less sour or offensive. (4.)

The *tongue* is more or less furrowed or cracked; the furrows either run the whole length of the tongue, or else are confined to the tip; the fissures, like the furrows may be deeper or smaller, straight or crooked, or in zig-zags, but they always run from the median line of the tongue towards the edges; the surface of the tongue may be furry or fibrillated, but it is more frequently scraped, robbed of its epithelium and as if varnished; in such cases it is flesh-red in color, with enlarged papillæ at its tip. The appearance of the tongue varies in the same

person, according as he drinks more or less, or the stomach is more or less irritated. The trembling of the tongue has already been alluded to.

The *breath* has an offensive smell, especially while digestion is going on, arising in part from the evaporation of alcohol from the bronchial mucous membrane, in part from the eructations, and in part from the filth in the mouth and between the teeth. (4.)

The mucous membrane of the throat is often unnaturally red and has a feeling of stiffness. That of the œsophagus is generally in the same condition, as is evident from the burning or slightly painful sensation which is often felt in swallowing. (4.)

The stomach may be sensitive or not, tense or relaxed, according as it is filled with food, air, &c. When emaciation commences to take place, the recti muscles, especially that of the right side, becomes rigid and cannot be relaxed. The appetite, which at first was good, or even excessive, especially for tasty and fatty food, becomes less and less, in proportion as the taste for drink increases. Inflammation and ulceration of the stomach may arise from other causes, and then will be aggravated by the alcohol. (4.)

Dysphagia, arising from spasms in the pharynx and œsophagus, is not uncommon; at first the attacks are periodical, finally, they become continual, and may lead to contraction of the œsophagus.

According to Orfila, if a large quantity of alcohol be taken during, or shortly after a meal, it coagulates the albuminous portions of the contents of the stomach, and this coagulated albumen passes off almost unchanged into the small intestines. The action of the gastric juice upon the other constituents of the food is prevented, and they undergo acetous fermentation. Hence, as alcohol prevents the digestion of albumen, it may prevent tuberculosis. (11.)

PATHOLOGY.—In Peters' cases the stomach presented various appearances, in some drunkards the mucous membrane is perfectly white, but somewhat thickened, with distinct flat mamellonated elevations of small size. My friend, Professor Middleton Goldsmith, was one of the first to call attention to the fact, that when a large quantity of undiluted spirits had been taken shortly before death, the stomach was often found wrinkled, as if from the action of a powerful astringent; the tops of the rugæ, or wrinkles, presented a punctated and vivid-red appearance, while the depressions between them were blanched, as if from the action of alcohol, and the whole mucous membrane was coated with a thick layer of white and very tenacious mucus. In other instances there were thickening and mamellation of the mucous membrane, with patches of slate-grey chronic inflammation, upon which spots of punctated, star-like, or diffused hæmorrhagic effusion had supervened. In ten or twelve of the worst cases in which from three pints to two quarts of liquor had been swallowed within thirty-six or forty-eight hours before death, we found extensive hæmorrhagic effusion in a larger portion of the walls of the stomach, with exudation of blood in large patches under the mucous membrane. (11.)

In Ogsten's cases the stomach was unusually small, or atrophied in

sixteen; highly congested in ten; false melanosis in two; softening of the mucous membrane in two; hour-glass contraction in five; unusual thickening or hypertrophy in one; covered with copious mucopurulent secretion in one.

Ogsten places much stress upon the unusually small size of the stomach, altogether different from any mere state of emptiness or natural contraction of the organ; in short, he regards it as such an atrophy of the whole stomach as that viscus might have presented had its growth been arrested in early life. Thus, in one case the stomach was only half the ordinary size; in a second it was not larger than that of an infant at birth; in a third as barely exceeding the diameter of the duodenum over the greater part of its extent; and in the remainder as unusually or remarkably small as compared with the rest of the intestinal tube.

I feel confident that there was no actual atrophy in many of these cases. I have seen many cases in which a large quantity of pure spirits had been taken, probably enough to cause death without the aid of other causes, in which the stomach seemed unusually small from the powerful corrugating action of the Alcohol, but such stomachs could be easily stretched to their natural size. It is true, however, that many habitual drunkards take very little solid food, and hence as the stomach is very rarely fully distended, it may finally remain almost permanently contracted. (11.)

Clinical Remarks.—Alcohol is homœopathic to many forms of irritation and congestion of the stomach; it is a favorite remedy against dyspepsia from debility; it relieves many forms of nausea and vomiting and may prove homœopathic to the morning-vomiting of pregnant women. It is also homœopathic to acidity of the stomach and water-brash. (11.)

According to our experience, about one dyspeptic in five can take brandy with benefit, provided, it is employed in a very dilute form, and is drank during dinner. As a general rule it will disagree with dyspeptics of a bilious temperament, while those who are nervous, or lymphatic, will be able to use it with impunity, and occasionally, with advantage. (10.)

Bowels.—The small bowels generally partake of the chronic irritation and congestion which obtain in the stomach; but the symptoms do not all arise from chronic inflammation, but from the influence of the altered chyme which comes down from the stomach, altered composition of the bile, imperfection in the nutrition in general, and of the composition of the blood. Hence, after death the small bowels may appear nearly healthy. But in higher grades of alcoholismus there will be more or less difficulty of digestion, colic pains, flatulence, persistent constipation, or alternations with diarrhœa, with putty-like, globular, blackish or light grey fæces, or constant diarrhœa with bilious discharges, or like clay dissolved in water, or slimy or bloody matters.

A larger quantity of pure Alcohol also reaches the duodenum, mixes

with the bile, which loses its alkaline properties, and can no longer be precipitated into insoluble flocculi, by the addition of the acid chyme, as is normally the case; in the natural state, this insoluble precipitate from the bile is not re-absorbed, but is cast out of the body with the fæces; in drunkards, however, no such precipitate ensues, the bile remains fluid and unchanged by the chyme, and a large portion of it is re-absorbed. Hence the bilious disorders in topers and the frequent occurrence of jaundice. Large quantities of acid chyme and imperfectly digested food pass along the small intestines, and even reach the cæcum and colon, when they also undergo a farther acetous fermentation. Hence the sour eructations, colic from acidity, irritation and flatulence, and the dyspeptic troubles of drunkards.

PATHOLOGY.—The small bowels in Peters' cases were literally filled with bile, and their mucous membrane thickly coated with a very tenacious mucus. In eight or ten of the worst cases, numerous and extensive patches of hæmorrhagic effusion were found, with copious exudation of blood in and beneath the mucous membrane. (11.)

Ogsten found unusual contraction of the intestines in six cases; softening of the mucous coat in two; enormous distention in two; atrophy in one case, the bowel being attenuated and translucent; congestion of the duodenum in one.

Clinical Remarks.—It is quite homœopathic in diarrhœas proceeding from an atonic condition of the mucous membrane of the intestines, and from chronic inflammations of this structure. It likewise proves curative in diarrhœas caused slight irritation of the mucous coat in consequence of colds, improper food, &c. (10.)

Omentum.—The appearance of this organ was generally very peculiar; it was generally equally filled with an ashy grey slushy fat, but no large masses or lumps of fat were met with. Our attention was first called to this sign in Vienna; it is there regarded as so characteristic that a cadaver was often judged to be that of a confirmed drunkard, from a glance at the omentum, when the abdomen is first laid open. (11.)

In Ogsten's cases the omentum was loaded with fat in four, coincident in all with abundant subcutaneous fat, in two with fat around the heart, in one with conversion of the veriform appendages into large fatty masses.

Mesentery.—This was always loaded with a thick layer of whitish yellow fat. (11.)

Liver and Portal-System.—Alcohol rarely or never causes acute inflammation of the liver in temperate climates; but it often causes congestion, attended with jaundice; also enlargement.

The blood which returns from the intestines into the portal-system and liver, is more or less mixed with Alcohol, imperfect bile and other undigested and impure matters; hence the abdominal venous plethora and subsequent affections of the liver. As much bile is returned to the liver, it is doubtless re-secreted from it again with great rapidity; hence, among

other causes, the large quantity of bile which is usually found in the gall-bladder and small bowels.

Abdominal dropsy only occurs in drunkards after the liver has been diseased, indurated or granulated for a long time. It is apt to remain isolated, or unassociated with general dropsy; even the feet and legs are not apt to swell. The contrast between the distended abdomen and emaciated extremities, is very striking in this form of dropsy. (4.)

PATHOLOGY.—In Peters' cases the liver in moderate drinkers was found a little larger than natural, somewhat softened, and its external surface dotted with whitish patches of fatty infiltration, which extended but two or three lines into the parenchyma; the color of the rest of the organ was of a rather darker red than natural, and the edges retained their normal sharpness. In excessive drinkers the liver was considerably larger, the edges more obtuse, and the patches of fat larger and more numerous. In old habitual drunkards the liver was very large, weighing at least six or eight pounds, and often ten or twelve; the edges were very thick and much rounded; the parenchyma almost white with fat, soft, fragile, and the peritoneal covering could be torn off in large pieces with great ease. Granular liver was found in four or five cases only; and gall-stones only twice. (11.)

Ogsten found the liver enlarged in thirty-two cases; granular in fourteen; nutmeg liver in thirteen; fatty liver in twenty-four. Cirrhosis was only present in five cases out of one hundred and seventeen.

Clinical Remarks.—Alcohol is homœopathic to enlargement of the liver, fatty condition of this organ, and to the nutmeg and granular liver; also to biliousness and jaundice; and the ascites from disease of the liver. (11.)

Spleen.—Although the spleen in those who die of delirium tremens is generally enlarged, soft and brittle, and swells more rapidly and considerably when drunkards are attacked with intermittent fever, still no actual alterations of structure take place during the course of alcoholismus-chronicus, neither are there any symptoms referable to this organ. (4.)

PATHOLOGY.—In Peters' cases this organ presented but few characteristic alterations. It generally retained its normal size, but was somewhat congested and softened. Occasionally it was rather larger than natural, but as a rule, the small size of the spleen contrasted strongly with the very great size of the liver. (11.)

In Ogsten's cases the spleen was indurated or hepatized in ten; enlarged in two; atrophied in one; softened in one. It was softened in fifteen per-cent. of the cases, and hypertrophied in eighteen per-cent.

Kidneys.—Pain and sensitiveness in the region of the kidneys are apt to arise after a debauch, when the urine may also contain albumen, or the serum of the blood, owing to a transient but decided congestion. At times the urine also contains the coloring matter of the bile, viz. when there is congestion or chronic disease of the liver; or an excess of phosphates or urates, especially when the liver is indurated; or it

may become alkaline, when symptoms of paralysis arise. Drunkards are particularly apt to get disease of the kidneys when they are attacked with relapsing fever, and ague, or chronic rheumatism.

PATHOLOGY.—In Peters' cases the kidneys were generally somewhat enlarged, flabby, their cortical substance infiltrated in numerous small spots, with a whitish fatty or albuminous substance; occasionally they were granular; the pelvis and ureters were generally in a state of chronic slate-grey inflammation. (11.)

In Ogsten's cases there was general fatty degeneration in one; congestion in four; sometimes coincident with nutmeg liver and albuminous urine; enlarged in thirteen; atrophied in one; buff-colored, with atrophy of the of the cortical portion, in four; with albuminous urine in five.

Bladder.—In Peters' cases the bladder generally presented no unusual appearance; but in four or five of the worst cases there was a state of hæmorrhagic exudation which rivalled in extent and severity that which has already been described as occurring in the stomach and bowels. (11.)

When drunkards become weak or partially paralytic the bladder will partake of the debility of the rest of the system.

Clinical Remarks.—In retention of urine from paralysis of the bladder, bathing the hypogastric region with Alcohol, and allowing it to evaporate, is occasionally useful.

Lungs.—**PATHOLOGY.**—In Peters' cases these were generally not much diseased; at least dyscratic organic disease of them directly attributable to Alcohol was not often met with. Congestion of the lungs was very common. Where large quantities of spirits had been taken shortly before death, the lungs were often found in a state of extensive splenization; they appeared perfectly saturated with dark blood, which soon changed to a florid red on exposure to the air, except that which flowed from the large severed vessels, for this remained thick, dark and tar-like. The parenchyma of the lungs was heavy and semi-solid to the feel, and somewhat softened, as the finger could easily be forced through it. The bronchi were almost always found reddened, somewhat dilated, and more or less filled with catarrhal secretions.

Dr. Peters feels obliged to call particular attention to the infrequency of phthisis in drunkards; in the seventy cases he never met with a tubercular abscess, even of the smallest size, while a small number of chalky or obsolete tubercles was frequently noticed; and cicatrices were also occasionally found marked by the presence of puckering of the surface of the lungs, of solid lumps or stripes which were readily felt before the lung was cut into, and when this was done, they were found to consist of masses or stripes of callous, fibrous tissue, around which were rarely discovered a few discrete, grey, crude, small tubercular granulations. In every instance these appearances were strictly confined to the upper third of the superior lobes,

and all the rest of the lungs was entirely free from either recent or old tubercular disease. (11.)

Ogsten also says that so far as his 117 cases go, his observations bear out the correctness of the now commonly-received opinion as to the *comparative immunity of drunkards* from tubercular affections.

In Barclay's Report of the fatal cases of disease of the brain, occurring during the last four years in St. George's Hospital, in ten fatal cases of delirium tremens; tubercles were found in the lungs, in six cases, once recent, and five times in the form of a cretaceous mass.

In seventy-three of Ogsten's cases, there was effusion into the pleura in three cases; adhesions of the lungs in twenty-five cases; emphysema in twenty-one cases; *tubercles and those latent, in only one case.*

Ogsten says that the additional labor thrown upon the lungs, when Alcohol has entered the circulation after its absorption and the retardation which takes place under these circumstances of their functional activity from this cause, as well as by the toxical effects of the Alcohol on the medulla oblongata, will alone go far to account for the frequency of morbid changes in these organs in drunkards; still, there can be but little room for hesitation in attributing many of these morbid changes in part at least to other causes, such as exposure to cold.

Ogsten places much stress upon the frequent occurrence of emphysema in drunkards; and emphysema, it is well known, almost excludes tubercles. The emphysema of drunkards is supposed to arise from a lax or flabby, non-contractile or debilitated state of the lungs, as it never occurs unaccompanied by pulmonary collapse, or by one or the other form of pulmonary atrophy. There is probably a fatty degeneration, or some similar defective nutrition of the tissues of the lungs.

Skin.—In the earlier stages of drinking the skin is soft, velvety and much disposed to perspiration; gradually this changes, and finally it becomes dry, rigid, thick, dirty or yellowish grey, and a variety of eruptions are apt to break out, especially eczema and prurigo. Varices and ulcers of the legs also occur, but the latter may also be caused by eczema, erysipelas, accidental injuries, &c., but they are always difficult to heal and frequently break out afresh.

The cellular and adipose tissues undergo various changes; at first they are generally the seat of a larger or smaller quantity of greasy, greyish-white fat, which is deposited partly under the skin, partly between the muscles, and partly in the omentum and in various portions of the abdomen. In the latter stages this is reabsorbed and emaciation occurs; then we find a gelatine-like mass under the skin, followed by serous exudations and anasarca, or an excessive degree of emaciation.

ALCOHOL-SULPHURIS.

LIQUOR LAMPADII, CARBURET OF SULPHUR.

AUTHORITIES.

Homœopathic Provings by James W. Metcalf, M.D. (26.) Peters (11.) Marcy (10.)

GENERAL REMARKS.

Lampadius, in 1796, while distilling a mixture of pyrites and charcoal, procured a clear liquid in the receiver, which he named *Alcohol-sulphuris*, or the Alcohol of sulphur. It consists of one equivalent of carbon and two of sulphur. (26.)

It is a transparent, colorless, volatile and inflammable liquid, with a very pungent taste and peculiar odor, somewhat ethereal, and yet partaking of that of sulphuretted hydrogen. It is insoluble in water, soluble in alcohol and ether, and in the oils generally. Its solvent powers are remarkable, as it dissolves sulphur and phosphorus rapidly and in considerable quantities. (26.)

LOCAL EFFECTS.

Head.—Pain in the forehead, which draws towards the left temple and remains there for two hours. Pressive frontal headache, lasting almost all day, and accompanied with transient pains in the temple. Drawing and tearing pain, stretching from the forehead to the temples, lasting all day, more severe in the room and during rest, relieved by walking in the open air. Dull pain in the frontal region, with nausea and heaviness of the whole head. Thumping pain in both temples. Violent pressive pain in the right temple, with malaise, desire to vomit, and rumbling of wind in the bowels. (26.)

Clinical Remarks.—It may prove useful in some forms of sick-headache, especially when the pain commences in the forehead and extends to one or the other temples. (11.)

Eyes.—Burning and itching of the lids; pustules on the lids, lasting four days. Dilatation of the pupils, with quickness of the pulse. Abundant secretion of whitish yellow mucus in the eyes. Lachrymation of the eyes; twitching and trembling of the muscles of the eyes and lids. (26.)

Clinical Remarks.—It is homœopathic to scrofulous affections of the eyes and lids; to twitching of the eyes and lids, such as occurs in scrofulous, nervous and verminous children. (11.)

Ears.—Pain in the ears as if some one were striking upon the tympanum with a dull instrument. (26.)

Face.—Redness and puffiness of the face; heat of the face and hands. Lancinating and tearing pains in the cheeks, extending up to the temples and lasting two months. (26.)

Clinical Remarks.—It is homœopathic to some rheumatic and neuralgic affections of the face. (11.)

Mouth.—Dryness of the lips and mouth; irritation of the cavity and isthmus of the pharynx, followed by a sensation of contraction in the larynx, with gagging cough and quick breathing. Gum boils. Pasty, disagreeable taste in the mouth, with foul taste of the pharyngeal mucus; bitter sharp taste in the mouth, or very repulsive acrid taste, or sweetish putrid taste. Great accumulation of saliva, with sweetish taste; very frequent spitting, pale red swelling of the uvula and velum. Burning and scraping in the pharynx and œsophagus.

Clinical Remarks.—It is one of the most homœopathic remedies to chronic pharyngitis, which is so often mistaken for chronic bronchitis; to irritation of the pharynx, with much hawking and spitting, and gagging cough from the irritation of an elongated uvula, especially when these symptoms occur in bilious and dyspeptic subjects. (11.)

Stomach.—Very abundant eructations; sour burning, acrid regurgitations (*pyrosis*) occurring one or two hours after eating. Continual acid regurgitations. Regurgitations of air with nausea, discharge of flatulence upwards and downwards. Burning in the stomach and hepatic region; heat in the epigastric region, which ascends and occupies the whole chest; violent heat, ascending from the stomach to the head. Fullness in the stomach, with eructations, yawning, desire to vomit, and dizziness. (26.)

Clinical Remarks.—It is homœopathic to pyrosis and heartburn, to various dyspeptic and bilious derangements. (11.)

Abdomen.—Great inflation of the abdomen, with rumbling of wind and tearing colic; colic-pains after eating; slight wind-colic from time to time, with desire to urinate; colic-pains with loose stools and flatulence. Paroxysm of disagreeable pain in the left lobe of the liver. Soft stools, preceded by pain in the left lobe of the liver, and followed by pains in the cæcal region. (26.)

Clinical Remarks.—It is homœopathic to flatulence, bilious derangement, bilious and flatulent colic, and congestion of the liver. (11.)

Cæcal Region.—Lancinating, twitching and pinching pains in the region of the cæcum, not relieved by discharge of flatus and increased by pressure, by turning from one side to the other, and doubling-up the body. Dull pains in the region of the cæcum. (26.)

Clinical Remarks.—This is one of the few drugs which seems to exert a specific action upon the cæcum. (11.)

Stools.—Liquid stools; slimy diarrhœa; watery diarrhœa; liquid diarrhœa, with violent pain in epigastrium; sudden diarrhœa, after having dined with good appetite; violent diarrhœa, with tenesmus and sour evacuations. (26.)

Clinical Remarks.—It has cured a chronic diarrhœa, appearing every four or six weeks, attended with colic, the evacuations being liquid, frothy, yellowish, sour and attended with tenesmus. (26.)

Larynx.—Heat and irritation of the larynx; hoarseness and irritation of the larynx, with continual desire to hawk: cough provoked by a tickling at the bifurcation of the bronchi. Slight dry cough. (26.)

Clinical Remarks.—It is homœopathic to chronic irritation of the pharynx and larynx, with constant desire to hawk and spit, with hoarseness and short cough. (11.)

Chest.—Sensation of heat in the chest; congestion in the upper parts of the lungs; oppression of the chest; fullness of the chest. Slight stitches and pains about the chest. (26.)

Clinical Remarks.—It may prove homœopathic to the first stage of tubercular disease of the lungs; it may prevent the tendency to irritation and congestion of the upper parts of the lungs, which so readily lead to the fresh deposit of tubercles in consumptive patients. (11.)

Limbs.—Pains in and eruption upon the arms and legs.

Clinical Remarks.—It is homœopathic to chronic rheumatism; and to prurigo, and impetigo. (11.)

Skin.—Sharp itching and stinging in different parts of the skin, as if from nettles; itching in various parts of the skin, much aggravated by scratching; bleeding and burning of eruptions when scratched; (*prurigo*); eruptions of impetigo on the back of the hands, the pustules are seated on an inflamed red base, contain a yellowish cloudy serum, and form thick yellowish scabs. (26.)

Fever.—Great internal heat, with coldness of the hands and feet; general heat, headache, quick pulse, cramps in the calves of the legs and toes, without much thirst, and no perspiration. (26.)

Pulse.—Quick pulse, it rises from 76 to 90 or 95.

Sleep.—Sleeplessness from headache, dryness of the skin and general unpleasant heat, so that he is obliged to rise and bathe himself. (26.)

ALLIUM - CEP A .

COMMON ONION.

AUTHORITIES.

Wood and Bache Dispensatory. (7.) Vogt's Mat. Med. (20.) Dierbach's Mat. Med. (6.) Waring's Therapeutics. (44.) Hering. (28.) Peters (11.) Marcy. (10.) Frank's Magazine. (4.) Graves' Clinical Lectures. (29.)

GENERAL REMARKS.

Onions contain an ethereal oil, which is colorless, very volatile, of acrid taste and smell, and which causes inflammation of the skin when applied to it; when this oil is burnt, sulphurous acid is developed. Fourcroy and Vauquelin found Sulphur and Phosphorus in combination with this ethereal oil, and which give rise to the peculiarly dis-

agreeable onion-odor; also an abundance of uncrystallizable sugar, a mucilaginous substance resembling gum-arabic, free phosphoric-acid, and phosphate of lime, acetic-acid, citrate of lime, also pectic-acid. (7.)

According to Dierbach onions are rarely used as a medicine, although they have often been recommended as an article of diet to dropsical persons, while the expressed juice in tea-spoonfull doses, sweetened with sugar, has been praised for the same purpose. (6.)

Applied externally they also exhibit a diuretic action, whence the bruised bulbs have been used in the form of cataplasms over the abdomen in ascites. Consruch and Jenner have recommended them in spasmodic ischury and strangury. (6.)

Onions have been held to the nostrils for the relief of hysteric cramps; and a decoction in milk has been used as an injection against ascarides. (6.)

But still more frequently their irritating properties have been called in play in order to hasten the suppuration of abscesses, boils, buboes, either singly, or in combination with mustard, soap, &c. (6.)

The vapor of onions irritates the eyes and causes lachrymation; when used in excess the peculiar odor of onions is exhaled from the skin, and in one instance it was unmistakably detected in the pus of a fistula. (6.)

Children and delicate adults cannot well digest raw onions; they are apt to cause eructations, heart-burn, and cramps of the stomach. Epileptics should avoid them; also those subject to seminal emissions. (6.)

Hippocrates was acquainted with the diuretic action of this plant, and also recommends its external use against falling out of the hair. In paralysis of the tongue, Celsus recommended the chewing of raw onions; Appollonius used the juice in deafness. (6.)

Vogt recommends them against infarctions of the abdominal organs; flatulence; chronic catarrhal affections, with tough, glassy mucus; in diseases of the urinary organs, gravel, dropsy, &c. (20.)

Pereira says raw onions are occasionally taken as an expectorant, with advantage by elderly persons affected with a winter-cough. A roasted onion is sometimes employed as an emollient poultice to suppurating tumors, or to the ear to relieve ear-ache. The expressed juice has been given to children, mixed with sugar as an expectorant. The large quantity of Sulphur and Phosphorus which the volatile oil of onions contains renders them an applicable remedy in many lung-affections. (11.)

Sulphur, Graves says (see Clinical Lectures) will relieve chronic cough and long-continued congestion of the bronchial mucous membrane. It would appear that Sulphur when taken into the system is either eliminated by the kidneys in the form of sulphates, or exhaled from the skin and mucous membranes in the form of sulphuretted hydrogen, and in this way we arrive at some explanation of its beneficial action in diseases of the skin and chronic irritation of the bron-

chial mucous membrane. In fact, paradoxical and homœopathical as it may seem, Sulphur, although evidently stimulating, is nevertheless very efficacious in curing many diseases connected with or depending on inflammation or congestion. Thus what remedy gives such prompt and certain relief in that painful affection, piles? How rapidly does that specific irritation of the skin termed scabies, yield to its use! The celebrated Hoffmann was in the habit of adding Sulphur to his cough prescriptions in all cases of chronic bronchitis in the aged and debilitated, and Graves has no doubt that from five to ten grains of Sulphur, taken three or four times a day, is one of the best remedies in chronic cough accompanied by constitutional debility and copious secretion into the bronchial tubes; it has a tendency to produce elevation of the pulse, increased heat of skin and sweating. It is most homœopathic when the cough arises from a peculiar tickling or *itching* sensation about the throat-pit. (29.)

Hering thinks that onions fill a chasm between Aconite and Ipecac.; that it is peculiarly useful during many catarrhal epidemics. That it has a certain relation to Chlorine and to Phosphorus, and that it may be successfully used either before or after the use of Phosphor, or to complete with greater rapidity, cures which Phosphor has left unfinished. It would be more correct to assume that it has affinities with Sulphur and Phosphor. (28.)

Hering thinks that in *children* it is suited to many affections of the head and eyes; to catarrhs and constant discharges from the nose; to sore-throat, cough, rattling in the chest, colic, flatulence, disorders arising from worms and urinary difficulties. It will often have to be aided by Iodine, Spongia, Sulphur and Phosphorus. (28.)

In *adults*: it is also suited to catarrhal affections of the head and eyes; oppression of the chest, senile asthma, and the accompanying or alternating affections of the kidneys, bladder and urinary apparatus; disorders of the stomach and bowels, flatulence, chilliness, &c. (28.)

It very closely resembles Assafœtida in its actions. (11.)

A rather rare case of poisoning by *Allium-cepa* is reported in Frank's Magazine; a man aged fifty years, of large frame, sanguine temperament, of regular habits and always having enjoyed excellent health, was attacked a quarter of an hour after having eaten a raw onion with his bread and butter at supper, with violent cutting pain in the bowels, frequent urging to urinate, with ability to pass only a few drops of scalding urine.

Four hours later his physician found him walking through his apartments in extreme anguish; at times he would throw himself on his bed, complaining of constant violent pain in the left lower half of the abdomen near the umbilicus, accompanied by the above-mentioned urinary difficulty, with constipation, and violent thirst; his countenance had an expression of great anguish and despair; there was increased heat of the skin; pulse somewhat accelerated, full and hard. The pain in the abdomen was increased by the slightest pressure. The contents of the stomach were removed by an emetic, &c.,

and by the next morning the patient felt much better, but it required a day or two before he recovered completely. (4.)

General Symptoms.—Feeling of weakness and debility, inclination to lie down. Yawning, with headache, and pressure in the stomach. (28.)

Fever.—Chilliness, creeping in the back, especially at night, with increased urine, followed by heat and thirst. Heat, with rumbling in the abdomen, with catarrh, accompanied by thirst. Perspiration easily excited. (28.)

Skin.—Itching. Needle-stitches in the skin. (28.)

Sensorium.—Dizzy, dull and weak; despair with colic. (28.)

Head.—Dullness, pressure, fullness, heaviness in the head, especially in the occiput and posterior portion of the vertex, with heat, (while having a catarrh.) Worse in the evening, better in the open air, aggravated by returning into a warm room. Electric shocks through the head. Stitches from the sinciput, or from within to the ear. (28.)

Eyes.—Misty, weak, sensitive to light; with a catarrh. Lachrymation (slight). Redness of the eyes, itching, stitches, sensibility, more of the left side, burning, smarting as if from smoke. (28.)

Nose.—Fluid running from the nose, sneezing, acrid watery discharge excoriating the nose and upper lip. Fluent catarrh, with lachrymation, headache, heat, thirst, loss of appetite, cough worse in the room in the evening, better in the open air. (28.)

Face.—Heat in the face. (28.)

Taste.—Disgusting taste; tongue coated with dirty mucus, Foul smell from the mouth and throat. Teeth dirty yellow. (28.)

Throat.—Feeling of numbness in the throat. Pains in the throat at the root of the tongue, palate, and in the eustachian tube to the ear; as if a lump were in there. Dryness of the mouth. Hawking up of lumps of mucus. (28.)

Gastric Symptoms and Abdomen.—Much thirst. Nausea mounts with a rush from the throat upwards. Disgust. Eructations, with heat, rumbling and inflation of the abdomen; vomiting. Emptiness, weakness in the stomach. Pressure in the stomach, and tearing colic in the umbilical region, worse when seated. Transient flush; heat; violent pain in the left side, below, with desire to urinate, and burning on making water. Inflation of the abdomen,—relieved by the discharge of flatulence. Very fetid, slippery flatulence. (28.)

Clinical Remarks.—A physician who was very subject to colic, had a severe attack while upon a journey, and was obliged to stop at a farmer's house; he could get no medicine, and in despair ate a large raw onion; his colic was relieved instantaneously, as if by magic, and never returned again in like severity; the slighter attacks were always relieved by raw onions. Since then he has recommended them in more than twenty cases of colic, and always with

speedy benefit. He is satisfied that they are useful in cramp of the stomach, also in wind- and hæmorrhoidal colics. He thinks this a new proof of the correctness of the Homœopathic law, and Frank adds, he is doubtless right. (4.)

Urinary Organs.—Pressure and other pains in the vesical region. Copious urine. (28.)

Thorax.—Oppressed breathing from pressure in the middle of the chest. Cough and catarrh. (28.)

ALLIUM - SATIVUM.

COMMON GARLIC.

AUTHORITIES.

Wood and Bache's Dispensatory, (7.) Pereira, Mat. Med. (13.) Dierbach, Mat. Med. (6.) Vogt's Mat. Med. (20.) Teste. (30.) Peters. (11.) Marcy. (10.)

GENERAL REMARKS.

The peculiar taste and smell of Garlic depend on an *essential oil*, which is very volatile, and may be obtained by distillation, passing over with the first portions of water. This oil consists of a peculiar organic radical, called *allyle*, combined with one equivalent of *Sulphur*. The impure oil has an exceedingly pungent odor, and strong acrid taste; and when applied to the skin produces much irritation and even blisters. (7.)

The effects of garlic on the system are those of a general stimulant; it quickens the circulation, excites the nervous system, promotes expectoration, produces diaphoresis or diuresis, according as the patient is kept warm or cool, and acts upon the stomach as a tonic and carminative. It is also said to be emmenagogue; applied to the skin it is rubefacient and irritant. Moderately employed it is beneficial in enfeebled digestion and flatulence, and is habitually used for this purpose by many who have no objection to an offensive breath. (7.)

It has been given with advantage in chronic catarrh, humoral asthma and other pectoral affections in which the symptoms of inflammation have been subdued and a feeble condition of the vessels remains. It is used habitually and with great benefit in such affections occurring in children, as well as in the nervous and spasmodic coughs to which they are peculiarly liable. (7.)

Some physicians have highly recommended it in old atonic dropsies and calculous disorders; and it has been employed in fever and ague. (7.)

It is thought to be an excellent anthelmintic, especially in cases of ascarides, in which it is given both by mouth and rectum. The juice

in doses of a few drops is said sometimes to check nervous vomiting. (7.)

If taken too largely, or in excited states of the system it is apt to cause gastric irritation, *flatulence*, hæmorrhoids, headache and fever. (7.)

Bruised and applied to the feet it is much used as a revulsive in disorders of the head; it is especially useful in the febrile complaints of children, by quieting restlessness and producing sleep. Bruised in oil, it is often used as a liniment in infantile convulsions, and other cases of spasmodic or nervous disorders among children. (44.)

It is also used to resolve indolent tumors; and in cases of cutaneous eruption. (44.)

A clove of garlic, or a few drops of the juice introduced into the ear are said to be highly efficacious in atonic deafness. A garlic poultice applied above the pubes has sometimes restored action to the bladder in cases of retention of urine, from debility of that organ. (44.)

VOGT says that the acrid ethereal oil which exists in garlic gives this remedy some affinity with the empreumatic ethereal oils, and renders it serviceable in nervous and verminous diseases. Still its principal action is upon the skin and mucous membranes. A decoction in milk is used internally and in clysters against ascarides and lumbrici; it is also used against blenorrhœas of the lungs, genital organs and bowels; in diseases of the urinary organs, such as gravel and dropsy. (20.)

Dierbach thinks that garlic acts more upon the skin and onions upon the kidneys. (6.)

According to Medberg, garlic is very injurious to consumptive and bilious persons, and those suffering with hæmaturia. (6.)

Kolb says that it readily excites flatulence, dizziness and plethoric attacks. (6.)

Xenophon says that fighting-cocks were formerly fed with garlic, in order to make them more active and courageous. (6.)

According to Mérat and Defens' Dict. univ. de mat. méd., vol. 1. p. 189: "it sharpens the appetite, stimulates the stomach, facilitates the digestion and expels flatulence."—According to them it is an excellent remedy for phlegm.—"Pounded garlic has been applied to the skin, on account of its stimulating properties in paralytic or rheumatic diseases; in about two hours after its application, it will draw a blister, like a mustard plaster." Murray furnishes the following sketch of the empirical uses of this drug. The anthelmintic and febrifuge properties of garlic were known even to Plinius and Dioscorides, and since have been verified by a number of physicians of the highest rank. Rosenstein, Taube, and the English physician Bisset, have even expelled tænia with garlic. According to Laurembergius and Lind, garlic is not only a preventive of scurvy, but a real specific for this disease. Celsus and Dioscorides recommended it in old chronic coughs, accompanied by dyspnœa, and a profuse expecto-

ration of ropy phlegm. In accordance with this recommendation it was used with success by Mead, Rosenstein and even Murray. Rosenstein relates that, by means of garlic, he succeeded in stopping a chronic cough, with general prostration and excessive emaciation. —Three similar cases were cured by Teste. (30.)

Fever.—Catarrhal fever, with predominance of coldness; shiverings from day to day, coldness all over, with heat in the face, horripilations in the forenoon, and in the evening; general heat with malaise, thirst, tense pulse, sweat after twelve o'clock in the day time; sweat with itching; sour sweat; fetid sweat; vomiting during the fever. (30.)

Clinical Remarks.—In *low fevers*, onions, or garlic bruised and applied to the feet were recommended by Sydenham. In *intermittent fevers*, garlic is a highly esteemed Hindoo remedy. It is, or was also formerly employed in Europe; Bergius speaks highly of its virtues; he commenced with one clove night and morning, and increased the quantity until four or five were taken at a dose. (44.)

Sleep.—Oppression of the chest during sleep; coldness during sleep, which occasions frequent waking; thirst at night, preventing sleep. (30.)

Clinical Remarks.—Bruised and applied to the feet it is supposed to be especially useful in the febrile complaints of children, by quieting restlessness and producing sleep. (44.)

Skin.—Flacid skin; formication; excessive sensitiveness of the skin. Tension of the skin, in the joints; dry skin; white spots which afterwards turn yellow, and are accompanied with stinging and itching, red spots in the back, hands, on the inner surface of the thighs, and on the genital organs. (30.)

Clinical Remarks.—The quantity of Sulphur which onions and garlic contain may make them useful in many cutaneous complaints. (11.)

Mind, Disposition and Sensorium.—Vertigo when steadily looking at a thing for a long time; short-lasting, and only on rising from a chair. (30.)

Clinical Remarks.—As Kolb says that it readily excites flatulence, dizziness and plethoric attacks, it is doubtless homœopathic to some forms of these disorders. (11.)

Head.—Weight in the head; dull pain in the occiput in the morning, heaviness in the head, which ceases during the menses, and re-appears afterwards; throbbing in the temples; heaviness at the forehead, which scarcely allows one to open one's eyes. (30.)

Clinical Remarks. Bruised and applied to the feet it has been recommended by Sydenham in coma and cerebral affections. As it is homœopathic to dizziness and plethoric attacks it may prove useful when given internally in small doses. (11.)

Ears.—Buzzing in the ears. (30.)

Clinical Remarks.—WARING says that in atonic deafness and otalgia, the expressed juice of garlic is occasionally a useful application. In a severe case of otalgia he has seen the pain rapidly and entirely subside on garlic juice being introduced into the external meatus; the pain had previously resisted leeches, opiate injections, and counter-irritation. WILDE, however, (see Diseases of the Ear,) says that he has seen three cases, during one year, of violent inflammation of the membrana tympani and meatus caused by the use of garlic. (11.)

Taste and Appetite.—Hot taste in the mouth, coming from the throat, exactly like the taste of garlic, immediately after taking the drug; it continued the whole morning, and returned after the second breakfast, so strongly that it caused a flow of saliva, dryness of the lips and palate; profuse flow of sweetish saliva in the mouth, in the forenoon, after eating; more particularly in the afternoon and at night. Eructations; immediately sensation as if something cold were rising to the throat; voracious appetite, burning eructations after eating. (30.)

Stomach and Abdomen.—Straining to vomit, with retraction of the abdomen; burning in the stomach, stitches of pain in the stomach; twisting and pinching around the navel. (30.)

Clinical Remarks.—It is recommended in dyspepsia of long standing, occurring in old fleshy persons, whose bowels are deranged by the slightest deviation from their regular diet, when they complain of a flow of saliva after eating, of eructations and other gastric symptoms characteristic of garlic, and likewise of great weakness in the lower limbs, particularly in the knees. (30.)

Stool.—Soft stools. Diarrhæic stools, accompanied and succeeded by cutting pains in the abdomen and loins. Constipation, with dull pain in the abdomen, which continues almost all the time, (for eight days. (30.)

Urine.—Profuse, whitish urine, (which is rendered cloudy by the addition of nitric acid.) (30.)

Clinical Remarks.—Teste recommends *Allium-sat.* very highly in diabetes melitus, as a palliative. It has been used in retention of urine, in dropsy, and gravel. It would seem somewhat homœopathic to Bright's disease. In calculous diseases and ulceration of the bladder, Bransby Cooper relates a severe case, treated by Mr. Cline, in which, after a variety of remedies had been employed in vain, *leek tea* afforded the most astonishing relief. Cooper has used it several times since, sometimes with, at others without benefit. (44.)

Genital Organs.—During the menses pimples break out about the vulva, and extensive excoriations occur on the internal surface of the thighs; the spots are of a bright red color, and accompanied by itching and smarting on the inner surface of the labia majora and the orifice of the vagina. (30.)

Thorax.—Coryza, accumulation of phlegm in the throat in the morn-

ing, with heaviness in the head. Cough, with painful irritation in the windpipe; difficult expectoration of a glutinous mucus; cough in the morning, after going out of his room, with profuse expectoration of mucus; almost continual rattling of mucus in the bronchia. Stitches in one side of the chest; stitches under the shoulder-blades and pectoral muscles, increased while coughing and drawing a long breath. Embarrassed respiration. The chest symptoms are worse in the open air, after eating, and when stooping. (30.)

Clinical Remarks.—It is recommended in cases of erythematous angina, not preceded by coryza, occasioned by a cold or by excesses at table, and attended with a sticky feeling in the throat, with dryness, tickling, heat, and a sense of rawness in the larynx, roughness of voice, hollow, dry, and not very frequent cough, dry heat on the back of the hands, and slight moisture in the palms, ail of which symptoms generally come on in the evening. (Teste.)

In cases of chronic bronchial catarrh, with profuse mucous expectoration, without acute pains in the chest, (especially in fat individuals.)

In cases of permanent dyspnoea of long standing. In *hooping cough*, Dr. Dewees says he has never employed any remedy of equal service with Garlic in substance, to relieve the cough of habit, which often remains after hooping cough; he has used it repeatedly, and never seen it fail. A child, aged six or seven years, may eat one-third of a clove daily, gradually increasing the quantity. (44.)

Bark.—Stitches in the back; red spots on the back, apparently like tetter; tearing pains in the sacrum. (30.)

Upper Extremities.—Painful sense of contraction in the arms; tearing pain in the fingers; heat, followed by moisture, in the hollow of the hands. (30.)

Lower Extremities.—Tearing pain in the hip-joint; intolerable pain in the united tendon of the iliac and psoas muscles, worse on motion. Painful lameness in the thighs; boils on the thighs; digging pain at the tibio-tarsal articulation; stiffness of the feet; burning at the soles of the feet. (30.)

Clinical Remarks.—Three cases of rheumatism of the hips were cured by Allium. (30.)

General Symptoms.—General lassitude, especially, in the lower limbs, so that one dreads the fatigue of ascending a few steps only; lassitude, especially in the morning.

The pains caused by Allium are mostly pressive pains from within outwards, or tearing pains. (30.)

ALOE S.

AUTHORITIES.

Vogt's Mat. Med. (20.) Pereira Mat. Med. (3.) Dierbach Mat. Med. (16.) Neligan Mat. Med. Peters in N. Y. Jour. Med., March, 1845. (25.) Braithwaite. (14.) Noack and Trinks. (19.) Peters. (11.) Marcy. (10.) Schoenlein. (24.) Wood and Bache. (7.)

On the Nervous System.—Aloes does not act specifically, either upon the nerves of sensation or motion ; it may possibly exert a secondary action upon the great sympathetic nerve.

Clinical Remarks.—It has been used successfully in some troublesome nervous affections, such as hypochondria, melancholy, mania, cramps in the stomach, &c., when brought on by a suppression of the menstrual or hæmorrhoidal discharges.

Hæmorrhoidal congestion of the spinal marrow is most common in the cervical portion, there is stiffness and drawing pain along the nape, with difficulty on swallowing ; when the dorsal portion is affected there is stiffness of the arms, and compressing pain in the chest, which often amounts to dyspnœa and asthmatic attacks. (24.)

Many cases of hypochondria and melancholy owe their origin to functional derangement of the liver. Aloes, which exercises a specific action upon this organ, and promotes the bilious secretion, is quite homœopathic in instances of this character. Among the phenomena accompanying this variety of hypochondria, we usually observe constipation, stools scanty, dry, and clay-colored. Aloes rouses into action the torpid liver, promotes the intestinal secretions, and thus regulates the bowels, restores the normal fœcal discharges, and enables the nervous system to recover its impaired tone. (10.)

Vascular System.—It acts far more specifically upon the vascular system than upon the nervous ; it may, however, act specifically upon those parts of the great sympathetic nerve which accompany the blood-vessels into every part of the system. (11.)

Aloes undoubtedly exercises a special action over the venous system of the abdomen ; but its operation is strongly marked upon the pelvic viscera. (10.)

Blood.—It was once a common opinion that Aloes dissolved the blood, or increased its fluidity ; Lewis alleges that this is the condition of the blood drawn from persons who are in the constant habit of using alloetics, although according to Schwenke, it seems rather to coagulate than dissolve the blood when added to some which has been drawn from a vein. It was also an old opinion that it proved emmenagogue, from its power of dissolving the blood, and hence would be hurtful in scurvy and in all hæmorrhages proceeding from a

lax state of the blood and system. It is probable that Aloes acts in the same way upon the venous system that Iron does upon the arterial; they both diminish the quantity of fibrin in the blood, and increase the quantity of blood globules. (11.)

Fever.—Dierbach says it is a heating remedy, which readily excites febrile symptoms in young persons, such as a quick pulse and a troublesome sensation of warmth in the abdomen. The excited state of the portal system, which it so readily causes, may in some cases extend to the whole venous side of the circulation, and congestion to the head and chest, but especially to the abdomen may arise, attended with unpleasant heat, anxious feelings and throbbings, with increased sensitiveness and distension of the abdomen, frequent stools, mixed with blood, or bloody stools with violent and cutting abdominal pains, piles, violent pains in the kidneys, hot, scanty urine, with burning while urinating, and pain in the back. Hanisch says, in very sensitive and plethoric persons it may cause an excited state of the whole vascular system, so that the pulse becomes fuller and harder, the mouth dry with thirst, scanty discharge of red urine, increased warmth in the abdomen, throbbing and aching in the region of the liver, congestion to the head and chest, with oppression and anxiety, bleeding from the lungs and apoplexy. (25.)

Hæmorrhages.—Aloes is peculiarly apt to excite hæmorrhages, especially and more frequently from the hæmorrhoidal vessels and the womb; occasionally from the kidneys and bowels, and rarely from the stomach, lungs, and head. (11.)

Although it produces a slight specific action on the entire intestinal mucous membrane, its chief manifestations are in the lower portion of the large intestines. This action is so intense at the rectum, when large doses are employed, that venous congestions and hæmorrhages are often occasioned. (10.)

Clinical Remarks.—Aloes is one of the most useful remedies against vicarious hæmorrhages, such as occur from suppression of the menstrual or hæmorrhoidal discharges. I have several times removed hæmatemesis from suppression of piles or menstruation; also bleeding of the nose, and bleeding from the lungs. It may prove useful in hæmorrhagic apoplexy, from suppression of one or the other of these discharges, and should be borne in mind in all vicarious hæmorrhages. (11.)

Hæmorrhages occurring in chlorotic patients are often permanently removed by the use of Aloes. The following symptoms are especially characteristic: emaciation, pale and waxen countenance, uterine irritation, irregular menstruation, leucorrhœa, heat and irritation in the rectum, hæmorrhages from the nose, throat, lungs, and rectum, obstruction of the portal circulation, large secretion of urine, active sexual feelings. (10.)

Head.—Periodical headache, alternating with pains in the small of the back.

Clinical Remarks.—In apoplexy and other cerebral affections, Aloes is a valuable remedy, especially when these affections arise from a suppression of the menstrual or hæmorrhoidal discharges. (44.) Irregular hæmorrhoidal congestion to the head, with the attendant redness and heat of the face, illusions of vision and threatened apoplexy may be removed by Aloes. (11.) Serious affections of the head have sometimes disappeared on the occurrence of a hæmorrhoidal flux, and therefore in persons who have been subject to this discharge, but in whom it has ceased, it may be advisable to attempt its re-establishment, with a view of relieving other and more serious disorders. (44.) *In hæmorrhoidal congestion of the brain*, when the patient complains of dizziness, great heaviness and confusion of the head, and the choroid coat is blue with congestion; illusions of sight, such as sparks, flies, and spider-feet, before the eyes, and an approach to amblyopia amaurotica. From time to time severe turns of vertigo set in, so that the patient becomes much agitated, and supposes that he is attacked with apoplexy. The attacks are more severe in hot weather and when constipation is present. (24.)

Ears.—Drawing and stitching in the ears.

Clinical Remarks.—A few drops of a watery infusion of Aloes put into the ears, and a tea-spoonful, night and morning, of the simple tincture of Aloes with Liquorice, has removed the most obstinate deafness, loss of smell, and congestion to the head. *In hæmorrhoidal congestion to the head*, noises in the ears, illusions and hardness of hearing, are not uncommon. (24.)

Mouth and Throat.—Heat and dryness of the mouth; redness and dryness of the tongue; taste like clay; diminished appetite, with thirst, or increased appetite; bilious eructations, or taste of food. Dryness of the mouth and throat during the night, with large secretion of mucus in the morning, and bitter eructations.

Clinical Remarks.—Aloes is homœopathic to many cases of what may be called bilious sore-throat; i. e. when the irritation of an excess of bile in the system causes more or less irritation in the pharynx. Many cases of catarrhal, rheumatic, or inflammatory sore-throat occurring in very bilious persons, often require an intercurrent dose of Aloes to remove the bilious derangement, before the other symptoms will yield to the usual remedies. (11.)

Stomach.—Sensation of heat and tension in the stomach. Distention of the stomach, and feeling of tightness across the stomach, extending to each lobe of the liver. Increased secretion of gastric juice. (10.)

Clinical Remarks.—It has been recommended in derangements of digestion, depending upon debility of the muscular fibres of the stomach and bowels; against abnormal secretion of mucus, acid, or gas; in anorexia, dyspepsia, flatulent distention, and painful aching in the region of the stomach, with acid, rancid eructations, sluggish digestion, constipation, especially when these disorders occur in bilious and hy-

pochondriacal subjects. Its bitterness is said to render it an admirable stomachic, which promotes both appetite and digestion, some think that it regulates the due secretion of the gastric juice, while the ancients termed it the *mima ventriculi*. (11.)

Waring recommends it in dyspepsia, occurring in persons of a relaxed habit, or in those who have been debilitated by long illness, particularly if there is reason to believe that the duodenum is implicated.

It doubtless acts specifically upon the portal portion of the vascular system of the stomach.

It is the best remedy in *hæmorrhoidal congestion of the stomach and spleen*, when there is congestion and enlargement of the spleen, when pressure on the enlarged spleen causes difficulty of breathing in the left side of the chest, when there are pains in the spleen, following the course of the *vasa brevia*, sour eructations, heartburn, or sour vomiting; when there is distension of and pain in the stomach, with sensation as if a warm fluid had been poured out into it, followed by vomiting of blood. (24.)

In mild cases of dyspepsia, accompanied by an excess of the gastric secretions, water-brash, tasteless, or bitter eructations, and heartburn, Aloes in a highly attenuated form often proves beneficial. It has also been employed with success in indigestion caused by a lack of the bilious secretion. (10.)

Liver.—Aloes has been supposed to act upon the liver, from times immemorial. *Aloe bilens rubram expellit*. (RHazes.) *Aloe ad infernis intestinum bilem ducit*. (ARETAENS.) According to Sigmond their influence upon the liver is marked by the peculiar composition of the evacuations, the color and odor of which, and their peculiar pungent effect on the rectum, prove that an increased quantity of bile has been poured out. Wedekind assumes that the operation of Aloes upon the bowels depends on an increased secretion of bile, excited by its specific action on the liver, and asserts that as long as the stools are white or grey in jaundice, Aloes will not purge, even in large doses, while the purgative effect supervenes as soon as the fæcal matters contain bile. When there is an excess of bile it is apt to cause bilious dysentery and hepatitis. Vogt says that it exerts a special action on the liver and tends more to the restoration of a checked secretion of bile than any drastic purgative. Antyllus counts it among the remedies which evacuate yellow bile. It causes aching and tension and uneasiness in the region of the liver, bilious papescent stools, with heat of the whole body, while the evacuations are not watery and copious but fæcal and bilious, and emit a peculiar putrid smell. (25.)

Clinical Remarks.—Against slight functional derangements of the liver, Aloes is an excellent remedy. The symptoms for which it is particularly indicated are, irregular secretion of bile, the stools sometimes containing an excess, and at other times a deficiency of this fluid; heat, fullness, and pressure in the hepatic region; dull pains in

the liver ; lassitude, drowsiness ; yellowish tinge of the skin ; feeble appetite ; depression of spirits. (10.)

Vena Porta.—Another class of physicians think that Aloes acts primarily and specifically upon the portal system, and assume that their influence upon the liver and bowels is secondary to this. That it acts upon the vena portarum is fairly to be deduced, from the very peculiar state into which the hæmorrhoidal vessels are thrown by the congestions which so rapidly occur after a dose of this drug has been taken. Wedekind says it exerts a specific stimulant action on the venous system of the abdomen and pelvis, and hence causes an increased secretion of bile, irritation about the rectum and vascular excitement of the sexual organs. It readily causes stagnation and accumulation of blood in the abdominal vessels, and the various affections and consequences of plethora abdominalis. (25.)

Abdomen.—Pressure, tension, and heat in the region of the liver. Fullness, heat, and distention of the abdomen. Beating, boring, and stinging in the umbilical region. Diarrhœa, preceded by colic. Most violent colics. Discharge of a large quantity of fetid flatulence. Violent cutting pains in the abdomen. (19.)

Clinical Remarks.—It is one of the most homœopathic remedies against plethora abdominalis ; also against many forms of bilious and venous congestive colics ; also against many hæmorrhoidal and congestive colics. (11.) *In hæmorrhoidal congestion of the duodenum or malæna*, when there is a peculiar cutting or aching pain about the navel, aggravated a few hours after eating ; when the umbilical region is distended and rather hard, the bowels constipated, and the fæces as if burnt ; when there is a remarkable pallor of the external surface, coldness of the limbs and hands, and a peculiar pale yellow, earthy color of the face. Finally, there is a sensation as if a warm fluid had been poured out about the navel, the abdomen swells more and more, with a doughy or mushy sensation to touch ; the more the abdomen becomes disturbed the greater is the pallor of the skin ; the pulse becomes small, weak and trembling, the extremities cold, the features shrunken ; finally black tar-like passages take place with much straining. (24.)

Bowels.—It is a specific purgative, for when applied externally to a blister it will operate upon the bowels (GERHARD) ; tincture of Aloes applied to a carious bone has excited purging (MUNRO) ; an Aloetic pill applied to an issue has had the same effect (PEREIRA) ; also an Aloetic salve rubbed upon the abdomen (DIERBACH). Dr. HELLER injected a solution of half an ounce of socrotine Aloes in six ounces of warm water into the jugular vein of a cow, which had suffered for six days with obstinate constipation and constant vomiting, which had withstood all ordinary injections and purgative medicines ; the cow shivered immediately, followed by quickness of the pulse and respiration for one hour ; then succeeded frequent urgings to stool, by which, however, only a small quantity of hard fæces were evacuated. The

same procedure was repeated the next day, when violent straining produced first the discharge of some dry dung, followed by profuse soft evacuations; the vomiting ceased, and appetite and health soon returned. (4)

The part of the bowels upon which it operates by preference, is a matter of dispute. Wood and Bache think that it has a peculiar affinity for the large bowel, and acts rather upon its muscular coat than upon the exhalent vessels. Cullen agrees to this and asserts that it rarely or ever produces more than one stool, which seems to be merely an evacuation of what may be supposed to have been already present in the great intestine. Hardly any dose under twenty grains will produce a liquid stool, which effect is always attended with pain and griping; on the other hand the ordinary bulky and rather hard aloes-evacuation may, in innumerable instances, be constantly obtained from one to two grains. The slowness of its operation has also been advanced by Lewis in proof that it acts on the large rather than the small bowels, for Aloes hardly ever operates under ten or twelve hours, and often not till sixteen or eighteen, while even twenty-four hours may elapse. Finally, to be still more minute, Newman has conjectured that it acts more especially upon the circular than upon the longitudinal muscular fibres of the colon. Whether given in a large or small dose it hardly ever causes a copious evacuation, and an increased quantity does not produce a corresponding cathartic effect. (25.)

But these authors forget its decided action upon the liver and bile. Its effects upon these are so distinct and characteristic that when added to other purgatives its peculiar effects do not take place until some hours after the evacuations caused by the other purgatives have taken place, and the Aloes stools differ from them both in color and smell. It rarely or never causes watery stools, but the dejections are always yellowish, greenish, or blackish and slimy, and often emit a peculiar offensive and almost putrid smell; the color and odor of the evacuations, together with their pungent effect on the rectum, prove that an increased quantity of bile has been poured out. (25.)

It may cause emaciation, stricture of the rectum, and enteritis. If its use be long continued it causes dryness of the intestines, rigidity of the muscular coat of the bowels, especially of the colon and rectum, in consequence of which obstinate constipation may ensue. Very large doses may cause violent cutting abdominal pains, watery and long-continued diarrhœa, tenesmus and inflammation of the lower portion of the alimentary canal. The fæces may be enveloped in a thin pellicle of altered intestinal mucus, or there may be discharges of membranous-like pieces from the rectum, or very large rolled-up pieces of intestinal mucus. (25.)

One of the most common effects of Aloes is irritation of the rectum, giving rise, in some instances, to hæmorrhoids. Cullen has seen piles produced by large and frequent doses, with heat and irritation about the rectum and tenesmus. Fallopius says, if one hundred per-

sons, who had used Aloes freely as a purgative, at least ninety became affected with a hæmorrhoidal flux, which ceased when their use was omitted. (25.)

Clinical Remarks.—Aloes is one of the most homœopathic remedies against bilious diarrhœa and dysentery; it is also far more useful in hæmorrhoids than Nux or Sulphur. According to Dr. Belcher, it is indicated in *hæmorrhoidal dysentery* when the patient is restless and anxious, the face flushed, tormina troublesome, and tenesmus vehement, the evacuations being dark green in color, or bloody, with offensive mucus; when the abdomen is puffed up, the lungs oppressed, with frequent inclination to breathe deeply, and the pulse frequent. Also in dysentery in pregnant females, or those suffering with uterine congestion; or when it attacks emaciated persons, especially children with distended abdomens and tendency to marasmus. (7.)

Tilt says he has never seen hæmorrhoidal affections caused by Aloes, but he has often seen them relieved by it, and his experience is corroborated by that of Giacomina, Avicenna, and Stahl. In former times Aloes were regarded as the *sacra anchora* in the cure of hæmorrhoids of an asthenic character, although it produces active congestive piles. At times the moliminæ hæmorrhoidalæ pass over into flowing piles under the use of Aloes, while at others they cease without any discharge having been produced. Under the latter circumstances Hamisch conjectures that the tonic and stimulating effects of the Aloes removes the debility of the vessels upon which the premonitory signs of piles has depended; i. e. that the tendency to active congestion, produced by the Aloes overcomes the passive stagnation of blood which previously existed. Loeske asserts that if Aloes be given before the accustomed flow of piles comes on, the flux will ensue; but on the other hand if given while they are flowing a stoppage will be effected. (25.)

Urinary Organs.—Strangury, flow of blood from the kidneys; burning while urinating; violent pains in the kidneys; hot, scanty urine. Greenhow ascribes a diuretic effect to Aloes, and Moiroud injected four drachms into a vein of a horse with no other effect than producing the evacuation of a large quantity of urine. It has been repeatedly noticed that when squills and other diuretics failed to act, the addition of a small portion of Aloes has speedily produced a copious diuresis. (19.)

Clinical Remarks.—It has often proved useful in *hæmorrhoidal affections of the kidney and bladder*, when there is pain in one or both sides of the lumbar region, drawing pains along the ureters, towards the bladder, with scanty secretion of urine, and those derangements of the stomach which always attend kidney-affections, such as gastralgia, with good appetite, and vomiting soon after eating. These symptoms may increase until nephritic colic ensues, the pains are exceedingly severe, the abdomen is retracted, vomiting occurs, the urine is suppressed, until finally a quantity of dark blood-red urine is passed.

When the bladder is more particularly affected there are periodical, violent, and contracting pains in the neck of the bladder, especially while urinating; when the pains are very severe entire retention of urine may occur, or when any water is passed it is only in drops or jets, never in a full stream. The pains continue after urination and extend over the pubis. The patients can neither sit in comfort or assume any position in which the perinæum is pressed upon. At first the urine is not altered in quality, but finally blood is passed. Sometimes the urine is mixed with a large quantity of tough, ropy mucus. Hamisch says that aching in the region of the kidneys, with scanty discharge of hot urine, or tenesmus of the bladder from venous congestion of it, will often give way before the use of Aloes. (25.)

Genital Organs.—It causes a determination of blood to the womb, and fullness of its blood-vessels, especially the veins, and thus uterine irritation and menorrhagia are apt to be induced or increased by it. Vascular excitement of the sexual organs, immoderate flow of the menses, racking pains in the loins and labor-like pains are frequently induced by it. Discharge of blood from the urethra, drawing and burning pain in the sacral region. Burning while urinating, aching and heaviness in the pelvis, erections and pollutions, and excitement of the uterine vessels. (19.)

Clinical Remarks.—It is homœopathic to *hæmorrhoidal affections of the uterus*, in which there is aching in the region of the womb, pressing-down pain, with some prolapsus, varicose swellings about the neck of the womb, and in the vagina, with discharges of blood during the menstrual intervals; these discharges consist of a dark, pitch-like substance and have a different odor from that of menstrual blood; either before or after these hæmorrhages there may be a discharge of tough, greenish leucorrhœa, with the peculiar odor of hæmorrhoidal mucus.

By restoring the hæmorrhoidal secretion Aloes will often relieve the sensations of aching and weight on the pelvis, the erections, pollutions, and tenesmus, which are often felt as premonitory symptoms of piles. (25.)

Eberlee says that Aloes given in small but frequent doses deserves to be accounted the best remedy we possess for those protracted, exhausting, and obstinate hæmorrhages from the uterus, which occur in women of relaxed, nervous, and phlegmatic habits about the critical period of life. (25.)

In amenorrhœa it is, perhaps, more frequently employed than any other remedy in the dominant school, entering into almost all the numerous empirical preparations which are habitually resorted to by females, and enjoying a no less favorable reputation in ordinary practice. Schoenlein recommends the injection of a solution of ten grains of Aloes in a small quantity of warm fluid, to be thrown into the rectum at the period when the catamenia should occur. He states that its action is more certain than that of any other emmenagogue. Dr. Atwell has used it in this way with decided advantage. (44.)

Chest.—*Clinical Remarks.*—Aloes will often prove serviceable in *hæmorrhoidal affections of the chest*, when there are more or less of the signs of congestion of the lungs, viz.: aching upon one or both sides of the chest, difficulty of breathing, cough, with expectoration of but little mucus, no fever, but livor of the face, lips, cheeks, and tongue, followed by more or less hæmoptysis. (24.)

A L U M E N.—(*Alum.*)

SULPHATE OF ALUMINA AND POTASH.

AUTHORITIES.

Vogt's Mat. Med. (20.) Pereira's Mat. Med. (3.) Waring's Therapeutics. (44.) Wood and Bache Dispensatory. (7.) Frank's Mag. (4.) Orfila. (2.) Peters. (11.) Marcy. (10.)

GENERAL REMARKS.

This is a compound of Alumina, 10.92; Potash, 10.08; and Sulphuric acid, 33.68, and in its action it partakes of some of the properties of all these articles. It is generally supposed to act very much like Sulphuric-acid, only somewhat less severely, and more purely as an astringent. Others have compared its action to that of Sulphate of Zinc, Acetate of Lead, Sulphate of Iron, &c.; but it differs widely from all these.

In common parlance Alum is said to be a purely and simple astringent remedy, but the Potash which it contains also renders it somewhat of an alterative and deobstruent medicine. Besides, as all the Alums of commerce contain more or less of Sulphate of Iron, varying from five to seven parts in a thousand, it is also somewhat tonic and blood-improving in its action.

The immediate topical effect of a solution of Alum is corrugation of fibres and contraction of small vessels, by virtue of which it checks or temporarily stops exhalation and secretion, and produces paleness of parts by diminishing the diameters of small vessels. It is by these local effects that Alum, when taken internally, causes dryness of the mouth and throat, somewhat increases thirst, checks the secretions of the alimentary canal, and thereby diminishes the frequency and increases the consistency of the stools, as observed by Wibmer, when taken in doses of three grains, dissolved in five drachms of water, several times a day.

When taken internally in moderate doses it is absorbed into the system, and has been detected in the liver, spleen, and urine. Kraus has noticed that the urine becomes remarkably acid from the use of Alum.

When taken in large quantities the astringent is soon followed by

irritation, and the paleness by preternatural redness ; it may thus excite nausea, vomiting, griping, and purging, and even an inflammatory condition of the alimentary canal—effects which may sometimes be induced by small quantities in persons endowed with unusual or morbid sensibility of the stomach and bowels.

Barthez, from half drachm doses, solved in one ounce of distilled water, experienced a sense of contraction in the stomach, lasting for a quarter of an hour, followed by acute aching in the stomach.

From one drachm doses, solved in two ounces of water, he merely felt a more decided sense of contraction of the stomach ; his appetite was never disturbed, on the contrary he rather thought that it was increased.

From two and a half drachm doses he felt an inclination to vomit, lasting for a quarter of an hour, but no vomiting ensued ; three drachm doses caused vomiting and constipation ; the vomiting was easy and not preceded by much nausea.

Alum was detected chemically in his stools.

PATHOLOGY.—From doses sufficiently large to cause death in animals : The stomach was found filled with a large quantity of fluid ; its internal surface, throughout all its extent was covered with a greyish substance, intermixed with greenish and bilious-looking particles ; the mucous membrane was extensively reddened or inflamed, especially in the greater cul-de-sac, which was dark brown in color ; near the pylorus there was an extravasation of blood, and the mucous membrane was very red ; the coats towards the pylorus were extraordinarily thick and hard, as if they had been tanned, and were very firm under the knife ; the walls of the small bowels were slightly thickened, and coated with a yellowish-white granular substance ; the large bowels were filled with a yellowish, offensive fluid.

As Alum has been but little used by homœopathic physicians, a large portion of the clinical remarks must be derived from allopathic sources ; this is not to be regretted, because we take it for granted that homœopathsists claim to know, not only all that is contained in old-school writings and experience, but a great deal more. Hence we must take heed that our old-school brethren are not in possession of new or old facts with which we are not acquainted. (11.)

LOCAL EFFECTS.

Nervous System.—Alum is not supposed to act as prominently on the nervous system as Sulphate of Zinc, or Acetate of Lead.

Nerves of Motion.—It is said, from its action in lead and other colics and in whooping cough, to be an antispasmodic ; but Copland thinks it cures lead colic by exciting the partially paralyzed muscular coat of the bowels and thereby enabling them to expel retained matters of a noxious description. Too little is known about its action upon muscular fibres and nerves of motion to hazard any decided opinion. (11.)

Among the symptoms enumerated by Fournier, in the case of a lady who had taken a large quantity of Alum, we find "slight convulsive movements." Orfila also alludes to a similar case. (10.)

Nerves of Sensation.—It is not known that Alum acts specifically upon any of the nerves of sensation. (11.)

Ganglionic Nerves.—It is generally supposed that the action of Alum upon the nervous system is confined to the ganglionic nerves; it may be propagated thence to the vascular system, as these nerves follow the blood-vessels into every part of the human frame. (11.)

VASCULAR SYSTEM.

Heart and Arteries.—The especial action of Alum upon the heart and arteries, apart from its astringent action has not been particularly investigated.

Clinical Remarks.—In dilatation of the heart and aneurism of the aorta, Alum has been advised by Kreysig and Dzondi; Sundelin also mentions a case of supposed dilatation of the heart in which relief was gained by the use of Alum.

Venous System.—Alum is supposed to exert not only a blood-coagulating, but also an antiseptic power on the venous blood. (11.)

By astriction of the capillaries it may impede the return of blood from the arteries, and thus operate upon the venous system. (10.)

Capillary System.—This seems to be the great field of the action of Alum. It exerts an astringent effect upon the capillaries of all the mucous and serous surfaces, upon the lymphatic and blood-conveying vessels; hence it moderates or checks all profuse mucous fluxes arising from atony of the parts; by exerting a tonico-astringent action upon the tone of the vessels, it prevents passive hæmorrhagies, and even opposes the tendency to liquefaction and putrefaction of the organic mass when such is in operation. (11.)

Lymphatic System and Glandular System.—It is not known whether Alum exerts any specific and peculiar action upon these systems apart from its tonic and astringent action.

Fever.—Notwithstanding that Alum causes dryness of the tongue, mouth and throat similar to that which obtains in typhus and typhoid fever, it still has been strongly recommended in those diseases by Fuster, Fouquier, Dobler and Skoda. The two former recommend it in the second stage of abdominal typhus, when in consequence of ulceration of the abdominal mucous membrane and of its glandular apparatus, there are ichorous, offensive and blood-mixed loose stools. In 1838, Drs. Dobler, Skoda, Herz, and Folwarenzy placed their sole reliance upon it; many hundreds of cases have been treated and saved by it. (44.)

Blood.

Clinical Remarks.—The value of Alum in menorrhagia and hæ-

maturia has been already considered under the appropriate heads. In purely atonic hæmoptysis it likewise proves serviceable. Dr. Theophilus Thompson considers that it is one of the best direct astringents that can be employed, and thinks that it acts more efficiently when allowed to dissolve in the mouth, than when taken in mixture. In atonic hæmatemesis, Alum thrice daily in combination with Opium proves serviceable, although it is of inferior efficacy to the acetate of lead. In hæmorrhage from leech-bites, in that from the gums after the extraction of a tooth, and in other superficial hæmorrhages, a saturated solution or the powder of Alum locally applied is often an effectual styptic. (44.) In hæmorrhages whether proceeding from an exhalation or exudation from the extremities, or pores of the minute vessels, or from a rupture of a blood-vessel, a solution or in some cases the powder of Alum may be used with advantage to constrict the capillary vessels, and close their bleeding orifices. (3.)

Head, Mind, &c.—Great agitation, anxiety, restlessness have been observed as pathogenetic effects of Alum. (2.)

Clinical Remarks.—It has been used successfully in a peculiar form of mental alienation in which the patient plagues his family continually, keeps his or her bed almost entirely, without apparent necessity, has an appearance of enbonpoint from general bloating, but a sickly and sallow complexion, with burning down the œsophagus, tenderness over the stomach, cough and insupportable pain near the left groin or ovary. Under the use of Alum the patient will soon leave his bed, become rational and affectionate towards his family and attend to his duties. (4.)

Nose.

Clinical Remarks.—In profuse atonic epistaxis the injection of a solution of Alum into the nostrils often proves effectual in arresting the discharge. It is frequently also applied by means of a plug soaked in a saturated solution, and pressed up the nostril. (44.) Several cases of polypus of the nose are reported as cured by simply snuffing up a solution of Alum. (4.)

Alum reduced to an impalpable powder, and snuffed into the nostrils, has in a few cases within my own knowledge, effected cures of copious catarrhal discharges. As an application to nasal polypi, we can vouch for its utility. (10.)

Eyes.

Clinical Remarks.—In purulent ophthalmia, a collyrium of Alum is a useful cleansing application. In the severer forms, a saturated solution of Alum dropped into the eye, is occasionally of great service. In the purulent ophthalmia of Egypt, Clot Bey found great benefit from dropping into the eye a saturated solution of Alum and Sulphate of Zinc. Dr. Rognetta speaks highly of its value. (44.)

In the ophthalmia of India, commonly known as country sore eye, I can speak from experience of the efficacy of the following native preparation:—Place some finely powdered Alum on a heated plate of

iron, and whilst the salt is in a state of fusion, add a small portion of lemon or lime-juice, until it forms a soft black mass. This while hot, is placed entirely round the orbit, taking care that none of its gets beneath the eye-lids, as it causes under these circumstances intense agony. One or two applications, each being allowed to remain on twelve hours, are sufficient in ordinary cases to effect a cure. (44.)

In the ophthalmia of infants after the subsidence of acute inflammation, a collyrium of Alum is one of the most serviceable applications which can be had recourse to. I have employed it with success in some hundreds of cases. It has also the recommendation of Ramsbottom, Lawrence, Pereira, &c. In ophthalmia tarsi, a similar collyrium is advised by Howard. In the purulent ophthalmia of infants it forms the most efficacious remedy we possess. In these cases it is usually applied in the form of the Alum cataplasm. In ecchymosis of the eye, an Alum poultice is an effectual application. It is made by agitating a small piece of Alum with the white of an egg until it forms a coagulum. This is placed between two pieces of linen rag, and applied to the eye for some hours. (44.)

In the latter stages of conjunctival inflammation it is often proper.

As regards topical applications to the eye, a certain amount of judgment should be used. In the first stage of ophthalmia, it is sometimes considered expedient to cut short the disease by the application of a strong astringent solution. "It is not to be denied says Dr. Jacob, that such applications may have the effect of arresting the disease at once; but, if they have not that effect, they are liable to produce an increase of irritation." But as the details necessary for making the student acquainted with all the circumstances respecting the application of stimulating or astringent applications, in the first stage of ophthalmia, are too lengthened and numerous to admit of their proper discussion in this work, I must refer for further particulars, to the essay of Dr. Jacob's (*Cyclopædia of Pract. Med.*, art. *ophthalmia*) as well as to the treatises of writers on ophthalmic surgery. I may, however add, that whatever difference of opinion exists as to the propriety of these applications in the first stage of ophthalmia, all are agreed as to their value after the violence of vascular action has been subdued. In the treatment of the purulent ophthalmia of infants no remedy is perhaps equal to an Alum wash. (3.)

Ears.

Clinical Remarks.—In purulent discharges from the ears, topical applications of a solution of Alum are often serviceable. We have frequently seen chronic otorrhœa, disappear under the use of injections of Alum-water. (10.)

Mouth.—Very severe pain in the mouth. Burning sensation in the mouth. Dryness of the mouth. (2.)

Clinical Remarks.—In affections of the mouth involving a congested state of the mucous membranes, much benefit is often derived from the local application of Alum.

In ulceration and sponginess of the gums, whether mercurial or scorbutic, the lotion as for ulceration of the throat is found highly serviceable. It should be used several times daily. To scorbutic ulcers very finely powdered Alum in substance, may be applied. (44.) It forms a useful astringent wash in certain states of mercurial sore mouth, (3) and is used with the best effect to check profuse pyalism, whether from the abuse of mercury or other causes. (3.) It is an excellent topical application in the form of powder, in profuse hæmorrhages after the extraction of teeth.

Throat.—Very severe pains in the pharynx. Burning in the mouth, pharynx and stomach. (2.)

Clinical Remarks.—In catarrhal affections of the throat and fauces Alum is highly recommended as a local application. In chronic cases when the mucous membrane is much congested, and covered with mucus, which gives rise to a troublesome cough, Alum gurgles afford great relief and benefit. (44.)

In ulceration and relaxation of the throat, a solution of Alum in water, or decoction of Cinchona, proves a very useful gargle for ordinary cases. (44.)

It has been employed successfully as a gargle in elongation and loss of contractile power of the uvula. As an internal remedy in chronic ulcerations of the mucous membrane of the throat and pharynx, it is a remedy of great value. We have cured cases of this kind with small doses of Alum, after having been baffled for months, with other medicines which at first appeared to be more homœopathic. We are acquainted with a number of obstinate cases, which have been quite cured by the internal and topical use of the Rockville Alum spring water of Virginia. (10.)

Stomach.—Burning heat, and tearing pains in the stomach. Nausea and vomiting. Distension of the stomach. Intense thirst.

PATHOLOGY.—When confined in the stomach, Alum causes inflammation of the entire mucous membrane, worse near the great *cul-de-sac*, where it is of a deep brown color. The walls of the stomach are much thickened at the pyloric extremity, and hardened as if tanned. The walls of the small intestines are slightly thickened, and lined with a light yellowish substance. Traces of Alum may be found in the stomach long after it has been taken. (2.)

Clinical Remarks.—In catarrhal affections of the stomach, Sir J. Murray speaks in the highest terms of Alum. In one aggravated case, attended with pyrosis, a complete cure was effected by Alum in electuary. He considers that it renders the mucous coats more firm, and restores their tone and strength. (44.) He considers it especially useful in the peculiar affection of the stomach, attended by the frequent vomiting of a large quantity of glairy fluid. (7.) In prescribing Alum it should be remembered that the vegetable astringents decompose it, by which the astringent property of the mixture is probably diminished. (3.)

Taken internally in large doses Alum excites nausea, vomiting, griping, purging, and even an inflammatory condition of the intestinal canal,—effects which may perhaps be induced by small quantities, in persons endowed with unusual or morbid sensibility of the stomach and bowels; as in the case of the lady in whom dangerous gastro-enteritis was apparently induced by a single dose of a solution containing between ten and twenty grains of burnt Alum. Ordinarily, however, tolerably large doses of Alum may be given without any unpleasant effects. Thus Prof. Dumeril has given a drachm properly diluted in chronic diarrhœas, within twenty-four hours; Prof. Marc two drachms in passive hæmorrhages, within the same period of time, and M.M. Kapeler and Gendrin have administered three drachms at one dose in colica pictonum. (3.)

In habitual hæmorrhages from the stomach, such as are sometimes observed in hard drinkers, repeated doses of the first decimal trituration of Alum are highly serviceable. The *modus operandi* in these cases consists, probably, in the chemical or mechanical action exerted upon the mucous membrane of the stomach.

Bowels.—Distention of the bowels. Burning pains in the small intestines. Copious solid stools. (2.)

PATHOLOGY.—The walls of the small intestines are somewhat thickened, and lined with a light yellowish substance.

Clinical Remarks.—Alum was first used in colica pictonum, by a Dutch physician named Grashuis, and was *afterwards* in 1774, used in fifteen cases by Dr. Percival, with great success, and subsequently its efficacy was fully established. It allays vomiting, abates flatulence, mitigates pain, and opens the bowels, when frequently other powerful remedies have failed. The *modus operandi* of Alum in lead colic is not very clear, but the theory of its action is, that it converts the poisonous salt of lead in the system into an innocuous sulphate, and in support of this view must be mentioned the fact, that other sulphates (as those of Magnesia, Soda, Zinc and Copper,) as well as free Sulphuric-acid, have been successfully employed in the lead colic. But on the other hand, the presence of lead in the *primæ viæ* or evacuations, has not been demonstrated, though experiments have shown that when the acetate of lead is swallowed, the greater portion of it forms an insoluble combination with the gastro-intestinal mucus, and in this state may remain some time in the alimentary canal. Alum has also been found successful in other varieties of colic not caused by lead, and unaccompanied by constipation. (3.) In large doses it acts as a purgative.

In abdominal typhus, which was epidemic in Vienna, in 1838, chief reliance was placed on the internal exhibition of Alum. Under every phase of the disease, diarrhœa, delirium and debility, it is stated to have been equally beneficial. It was found particularly serviceable in checking the exhausting diarrhœa. (44.)

In infantile cholera Alum has been found to be signally successful.

Of sixty-seven cases treated with it by Dr Dürr only seven died. The age of the children varied from the period of birth to fifteen months. (44.)

In chronic diarrhœa, and diarrhœa mucosa, depending upon a relaxed condition of the mucous intestinal membrane, Alum given internally is often attended with great amelioration. Drs. Adair and Harrison speak favorably of it in this class of cases. (44.)

In chronic dysentery, Alum was formerly held in high repute. It has been advised variously combined, by Birnstiel, Loos, Hunnius, Michaëlis, Hargens, &c. Mosely and Jackson employed it, and Adair found it useful combined with Opium and aromatics in epidemic dysentery, occurring among negroes. (44.)

Injections of Alum-water, or of Alum whey are very useful in the copious and frequent hæmorrhages which sometimes accompany piles, and abrasions of the mucous membrane of the rectum. Cases of this kind now and then reduce patients to a very low and dangerous condition, and appear to resist all internal remedies. The astringent and toughening effect of these injections, have in some instances, arrested the bleeding promptly and permanently.

Rectum.—Smarting and burning at the rectum, after a solid stool; hæmorrhoidal tumors after a hard stool. (2.)

Clinical Remarks.—In prolapsus of the rectum, the injection of a solution of Alum proves serviceable. It may also be used in painful bleeding piles, when unattended by inflammation. (44.) (See Clinical Remarks under Bowels.)

Kidneys and Bladder.—When Alum has been absorbed into the system, it has been found shortly afterwards in the urine. But in its passage through the kidneys and bladder, we are not aware of any sensations it produces.

Clinical Remarks.—In hæmaturia, which resists the action of the acetate of lead and other ordinary remedies, the injection into the bladder of a solution of Alum is sometimes effectual in arresting the discharge; this, however, should not be had recourse to until it has been ascertained that the bladder and not the kidneys, is the seat of the disease. Dr. Prout observes that he has never seen any unpleasant consequences follow the use of this expedient; and that he has seen it arrest the most formidable hæmorrhage, when all other remedies had failed and when the bladder had repeatedly become again distended with blood, almost immediately after its removal. If after the use of the injection, coagula remain in the bladder, they should be broken up by repeated injections of cold water. Alum may be given internally at the same time; although as an internal remedy it is less efficacious than Gallic-acid. (44.)

In catarrh of the bladder it is highly spoken of by Sir J. Eyre. (44.)

In diabetes, under the idea that the discharge might be arrested by the use of powerful astringents, Alum in combination with other

remedies of the same class, was advised by Dorer, Brocklesby and others, but Dr. Brisbane satisfactorily proved that it was incapable of arresting the disease. (44.) Kraus observes that the urine becomes very acid from the use of Alum.

It has been used successfully against incontinence of urine (4.)

In one case of irritable bladder, in which the patient was obliged to pass urine every hour or two, both by day and night, grain doses of the 1st trituration of Alum every four hours effected a cure in six weeks.

Genital Organs.—Male and Female.

Clinical Remarks.—In gonorrhœa and gleet, the injection of a solution of Alum is often productive of benefit. Dr. Friedrich of Leipzig also advised its internal use; as well in the inflammatory as in the chronic stage. He states that under its use, all the symptoms subsided rapidly, and that he never saw any ill effects from its employment. In obstinate cases it may be advantageously combined with cubebs. In gonorrhœa præputialis, a solution of Alum applied on lint to the part, is generally effectual. (44.)

In leucorrhœa, Alum combined with Aloes, proves highly serviceable. It is also sometimes used in conjunction with Sulphate of Zinc. The decoction of oak-bark often forms a good vehicle. Dr. Burne found this solution most serviceable when simply applied continuously to the external parts. Dr. Dewees states that in some obstinate cases he has effected a cure by Alum and Nitre. (44.)

In menorrhagia and uterine hæmorrhage, Alum internally has been advised by Lentin, Müller, Hufeland, Dewees, &c., and it often proves effectual in controlling the discharge. Dr. Ferguson regards it as a highly useful styptic and advises it in doses with syrup of ginger, three or four times daily. In purely atonic cases, Alum in solution may be used as a vaginal injection. It is inadmissible, if any inflammatory symptoms are present. (44.)

In morbid growths and ulcerations of the uterine cavity, or of the os-uteri, an Alum hip-bath and vaginal injections are strongly advised by Drs. Lange and Ashwell, and its utility is confirmed by Delmas Recamier and others. Care should be taken that the fluid passes well up into the vagina. (44.)

In prolapsus uteri, the same measure is attended with the best effects. Dr. Nevins also speaks highly of a pessary composed of equal parts of powdered gall and Alum, enclosed in a fine muslin bag. (44.)

It has been recommended internally and locally against hypertrophy, induration and excoriation of the womb. (4.)

It will often cure obstinate ulcerated buboes rapidly, when applied locally. (4.)

Windpipe.—Sense of constriction in the windpipe. Heat and burning in the throat and larynx. (2.)

Clinical Remarks.—In angina membranacea, called by Bretonneau, diphtheritis, great importance has been attached to the employment of local applications, and among others, to promote the expulsion of

the false membrane he recommends the insufflation of finely powdered Alum. (3.) The most effectual means of administration, is in the form of an impalpable powder, blown through a quill, upon the affected part. (7.) It is recommended as an emetic in croup in preference to Antimony or Ipecacuanha. Prof. Meigs states that it acts more certainly and powerfully than those medicines and produces less prostration of the vital powers. (44.) In various anginous affections Alum is found highly useful, applied topically either in powder or solution. When the affection is attended with membranous exudation, its efficacy has been particularly insisted upon by Bretonneau, applied in solution prepared with vinegar and honey for adults and in powder by insufflation in the cases of children. Velpeau in 1835, extended the observations of Bretonneau, and has used Alum successfully, not only in simple inflammatory sore-throat, but in those forms of angina dependent on small-pox, scarlatina, &c. (7.) For hæmoptysis or spitting of blood, see Art. Blood.

Chest—Oppression of the chest. Tightness across the upper part of the chest. Sense of heat and burning in the chest. (2.)

Clinical Remarks.—In the chronic stage of whooping-cough no remedy has proved more efficacious than Alum given in increasing doses. A very excellent formula is recommended by Dr. Golding Bird, in which he combines it with Conium, (44.)

Alum is supposed to exert a sedative power in diseases of the chest by J. SYMONS, London Lancet, March, 1844, p. 42.

Dr. Simm of Ripon first recommended Symons to use it in whooping-cough, he found it to answer his fullest expectations, thence led to use it in other thoracic complaints.

It evidently so changed the expectoration as immediately to cause a copious discharge of mucus from the bronchi, and finally checked the superabundant secretion, did not produce thirst or any unpleasant symptoms and so far from aggravating the febrile state it often served materially to alleviate it.

It produced neither nausea, pain, nor constipation, while it sometimes relieved colic pains accidentally present.

Alum forty-eight grains, syrup half oz., hot-water five and a half ounces, i. e. eight grains to the ounce, one grain to a drachm or teaspoonful, children of three years, or three or four teaspoonsful per day, i. e. three or four grains per day, three to seven years, a dessert-spoonful three or four times a day, beyond puberty two tablespoonful per dose, adults twenty-four grains per day.

In acute and chronic bronchitis, especially when expectoration was ropy.

Even in very acute bronchitis in children with profuse secretion of mucus.

In the acute bronchitis of old persons supervening upon chronic morning cough.

In whooping-cough to allay irritation, restrain inflammatory tendency and diminish superabundant secretion.

In nervous asthma.

In phthisis.

In general it does not interfere with expectoration, the first effect is usually a copious discharge of mucus, followed by a diminution in quantity, without any oppression of chest or other indication of improper interference with the secretion.

Extremities.—In ingrowing nails the local application of burnt Alum will often effect a cure in three weeks, and that after extirpation of the nail had failed; the nail must be raised up so as to expose the whole of the sore and ulcerated part, which must then be dried and the Alum applied; the crust formed by this application must be removed every day and a fresh quantity applied. (4.)

Skin.—Creeping and coldness of the skin, soon after large doses, followed by heat and tingling of the same parts. (10.)

Clinical Remarks.—In rupia, Mr Erasmus Wilson states, that in one very obstinate case he succeeded in healing the ulcerations, after other applications had failed, by injecting a strong solution of Alum beneath the undermined edges. To the ill-favored ulcers left by ecthyma he advises the application of a solution of Alum, with or without Opium. (44.)

To flat nævi Dieffenbach recommends the use of a compress of lint, to be firmly bandaged on the morbid structure, and to be frequently wetted with a solution of Alum. The lint should be disturbed as little as possible and the compression maintained, if necessary, for several weeks. When the nævus becomes white, flat, and firm, its speedy cure may be expected. (44.)

To chilblains an Alum poultice is stated to be an excellent application. It is only admissible in unbroken chilblains. (44.)

To indolent and other ulcers, whether of the skin or mucous membranes, Alum has been found serviceable. It is particularly recommended by Dalmas. As it causes much irritation he advises it to be combined with Opium, and made into an ointment with lard: used thus it quickly determines the cicatrization of ulcers. It occasionally gives rise to great irritation. To repress the growth of fungous granulations, burnt alum sprinkled over the surface is very effectual. (44.)

Fever.—Fever, accompanied by intense thirst, continued nausea and vomiting, sleeplessness, agitation, animated expression of the face, pain and distension of the epigastric region, frequent pulse, and burning pains in the mouth, pharynx, and stomach. (2.)

Clinical Remarks.—In intermittent fever Alum was at one time much used, it having been prescribed by Ettmuller, Lindt, Muller, and others. Lange and De Hera recommend it with aromatics or Sulphuric-acid, or Ether, and Adair with Cinchona. It is rarely used at the present day. (44.)

ALUMINA.—(*Agilla*.)

PURE CLAY.

AUTHORITIES.

Hahnemann's Mat. Med. (1.) Noack and Trinck's Mat. Med. (19.)
 Jahr's Symptomen Codex. (32.) Teste's Mat. Med. (36.) Peters.
 (11.) Marcy. (10.)

GENERAL REMARKS.

Alumina is allied to Calcareæ, Baryta-c., Magnes.-carb., Silix, Carb.-vegetabilis and -animalis, Graphite and Sepia. Teste with characteristic flippancy and assumption asserts that it is the Sepia of chronic diseases.

The development of the curative powers of this drug are solely due to Hahnemann, and even as yet but little is known about and less is done with it in the Old School. Hahnemann recommended it especially in chronic disposition to eructations lasting for years, and to colds and catarrhs of the head of very long standing.

Dr. HIRSCHEL reports several cases of inflammation of the throat, chronic gonorrhœa, chronic induration of the testes in consequence of gonorrhœa, obstinate leucorrhœa and elevated papulous eruptions, burning red, violently itching spots about the organs of generation, cured by Alumina. (26.) The above experience of Hirschel is quoted by Teste as if it was his own (see page 327 of Hempel's Translation.) In fact we may state once for all, that Teste's book contains more lying and stealing; more flippant and unjustifiable assumptions, and more brazen hardihood of assertion than any modern book on the Materia Medica with which we are acquainted. Still, his style of writing is so pleasant, the compilations from various authors have been so industriously pursued, that we are half willing to forgive him his barefaced assumption of experience not his own, although we cannot forgive his putting down any happy or absurd thought, or arbitrary distinction which may enter his head as if it were the soundest and most original experience which has ever been divulged to the world. (11.)

It should always be borne in mind that Alumina is one of those substances which requires a high state of attenuation to develop its remedial powers. But when thus attenuated its atoms acquire the power of reaching those tissues for which they have a specific affinity, and of producing impressions which cannot be produced by this substance in its crude and undeveloped condition. In its natural state it is inert like crude Mercury; but when its molecules are sufficiently subdivided, its latent qualities become developed like the subdivided particles of Quicksilver when triturated into the blue mass.

In view of this fact it will be apparent that Alumina should always be prescribed in a highly diluted form.

Most of the symptoms of Alumina occur in the morning and evening. The symptoms are usually worse when sitting quietly, and after eating; and better when walking, especially in the open air. (10.)

NERVOUS SYSTEM.

Nerves of Motion.—It is homœopathic to various pains and weaknesses in the nerves of motion, and fibrous tissues, arising from arthritic, or scrofulous irritation of these parts, or from an alkaline or phosphatic condition of some of the juices or fluids of these parts. (11.)

From the experiments of Roth, and several French provers we infer that it exercises a depressing influence upon the nerves of motion. Thus shaking and trembling of the limbs, and paralytic weakness of the extremities are characteristic phenomena of Alumina. (10.)

Nerves of Sensation.—It is homœopathic to various changes of sensation and pains arising from the causes above alluded to, and others which cannot be more nearly designated. (11.)

Upon the nerves of sensation Alumina operates as a depressor. This is evinced by the numbness and prickling sensations which occur in various parts of the body during the provings.

Ganglionic Nerves.—It probably acts more decidedly upon these than upon the cerebro-spinal nerves. It is homœopathic to various pains in internal and external parts, and to various scrofulous, arthritic or phosphatic irritations of these nerves. (11.)

VASCULAR SYSTEM.

Blood.—The peculiar action of Alumina upon the blood can only be vaguely hinted; it is similar to that produced by the alkalies and alkaline earths in general, approaching towards a scorbutic or scrofulous condition of this fluid, marked by thinness of the blood, predominance of the white globules, deficiency of fibrin, albumen, iron and fat, with a probable excess of water and chlorides, leading to scorbutic or dyscratic inflammations, ulcerations, and deposits. (11.)

Venous System.—It may act somewhat more decidedly upon this than upon the arterial, or rather it may tend to depotentize the arterial system in strict proportion as it may tend to cause a preponderance of the venous. (11.)

Capillary Vessels.—This probably is the great field of the action of Alumina upon the blood and blood-vessels; this remedy doubtless tends to produce an excess of white blood, rather than of red; to prevent the action of the capillaries and cause various ulcerative, scorbutic and dyscratic capillary actions. (11.)

In its crude state Alumina is inert. But when its atoms are suffi-

ciently subdivided to gain entrance into the capillary-vessels, active impressions are produced both upon the capillary blood-vessels and nerves. The same thing is true of many other substances which have acquired new powers by the process of attenuation. (10)

Glandular System.—Alumina doubtless acts specifically upon the glands and lymphatics and upon those nerves and vessels which supply and control the operation of these organs. This is evidenced by its specific action upon the cervical, follicular and other glands, and upon the testicles. (11.)

Mucous Membranes.—Alumina seems to have a specific affinity for many of the mucous membranes, especially those of the nose, ears, throat, larynx, and sexual organs. (11.)

All of the mucous membranes are more or less affected by this substance. It produces irritation diminished secretion, and dryness of these tissues. The character of their secretions is also changed. It likewise renders them more sensitive to atmospheric changes, and to morbid influences generally. (10.)

Serous Membranes.—Its action upon these parts cannot be certainly made manifest; it seems to act more decidedly upon the mucous than upon the serous tissues. (11.)

By penetrating the minute vessels of serous membranes, the attenuated atoms of this drug do undoubtedly become capable of modifying their vital action. Thus an indirect specific effect is exerted upon their structures. (10.)

Fibrous Tissue.—It seems to be homœopathic to various pains and disorders of the cellular or fibrous tissues, arising from or connected with a scorbutic, phosphatic or scrofulous taint of the blood. (11.)

For the reasons before given, we infer that all tissues are effected to some extent, by Alumina, in consequence of its action upon the capillary-vessels and nerves. Thus, among its pathogenetic phenomena, we have lancinating pains and burning sensations in the carpal and tarsal articulations, pleural pains, &c. (10.)

Muscular System.—Its action upon this system is doubtless similar so that exerted upon the fibrous tissues in general. (11.)

It is homœopathic to certain weakened conditions of the muscles, with diminished animal heat, tremulousness, sense of weight, stiffness, numbness and fatigue in the whole muscular system. (10.)

Cellular Tissue.—It seems to act more decidedly upon the subcutaneous cellular tissue than upon the *cutis vera*; at least acne, urticaria, paronychia, cellulosa, rhagades, &c., to which it is more or less homœopathic are affections of the cellular tissue rather than of the skin proper. (11.)

Skin.—Tingling itching on all parts of the skin, causing to scratch one's-self a great deal. Small red or white pimples and blisters here and there; especially on the hairy scalp, forehead, nose, corners of

the mouth, chin, neck and shoulders, with burning and itching pains. (19.) Itching rash on the arms and lower limbs, the parts bleed after scratching. Humid scurf and gnawing tetters. The cutaneous troubles come on at every new and full moon. (32.) Itching of the mammæ. Itching at the verge of the anus. (10.)

Fever.—Pandiculations, lassitude with chilliness, feverish pulse, want of appetite, eructations with heaviness in the abdomen. Frequent chills; chilliness during the day, in the warm room, even near the hot stove; chills in the night, so as to be awakened by the same; shaking chills; chilliness with constant eructations, bitter taste in the mouth, flow of saliva, great lassitude, dizziness, headache, especially in the temporal region as if the head would fly in pieces. Chilliness during stool. Creeping chills in the evening on the slightest motion, sometimes with flying heat of the face, internal chilliness, with hot hands and ears. (19.)

Paroxysms of fever in the evening, consisting of chilliness and shuddering over the whole body, especially over the back and feet, sometimes accompanied with heat of the face, and alternation of coldness and warmth, or followed by heat of the body and sweat in the face, generally without thirst. Heat with anxiety and sweat especially at night, sometimes palpitations of the heart. Morning-sweat, especially when remaining in the bed after six o'clock. (32.)

Clinical Remarks.—It may prove homœopathic to several forms of chronic dyscratic fevers, or sub-acute inflammation, and to chronic and obstinate fever and ague, with a great predominance of coldness and debility; and to slow consumptive fevers under like circumstances. (11.)

Mind and Disposition.—Long-continued weakness of memory, inability to concentrate the mind; confusion of ideas. Forgetfulness. Despondency, with inclination to weep. Timidity. Fear. (19.) Joyless and desponding. Anxiety, anguish, oppressive and vague fearfulness, uneasiness as if he had committed a crime. Ennui, no desire to do anything. (32.) Nervousness. Irritability. Constant restlessness and dissatisfaction, which prevents sound, refreshing sleep. (10.)

Clinical Remarks.—It may prove as useful as Baryta in the hypochondria of aged people, and in that arising from obstinate catarrhal and dyspeptic derangement. (11.)

Alumina has sometimes proved serviceable in mental depression, diminished intellectual power, and nervous excitability arising from an impaired condition of the vital forces. It is also homœopathic in mental ailments proceeding from excessive seminal and prostatic losses. The usual concomitant symptoms in these cases are, general muscular debility, numbness and stiffness and trembling of the limbs, disagreeable sensation of failure of vital heat, heavy beating of the heart. (10.)

Sensorium.—Vertigo on turning, stooping, walking, sitting, so as to

fall. (19.) Want of ability to recollect things. Stupid dullness and numbness of the head, particularly, early in the morning. Vertigo as if everything were turning in a circle. (32.)

Clinical Remarks.—It may prove homœopathic to the vertigo of aged people affected with an atheromatous or earthy deposit in the coats of the cerebral and cardiac arteries. It may rival Baryta in the prevention of apoplexy under these circumstances. It may also prove useful in brain- and other affections arising from the phosphatic diathesis. (11.)

Vertigo or swimming in the head, when occurring as symptoms of mere debility, or impaired vital heat, have been relieved by Alumina at a high potency. But in instances of this description it can only be regarded as a remedy of secondary value. (10.)

Sleep.—Yawning and drowsiness. Lies awake for a long time on account of heat and restlessness in the limbs. Sudden starting from sleep, caused by disturbing dreams. Sleep full of disturbing dreams. (19.) Restless night-sleep, he tosses about, and wakes frequently, with heat and anxiety, especially after midnight; unrefreshing night-sleep, a mere slumbering, with sensation in the morning as if he had not slept enough. Deep, sound sleep, especially towards morning; sleeps until late in the morning, he wakes with difficulty early in the morning, frequently with languor, weariness and yawning. Symptoms at night, when in bed; uneasiness in the limbs and tossing about; anxiety, asthmatic oppression and sweat when waking; great variety of dreams. Symptoms in the morning on waking. Lowness of spirits as if oppressed with grief. (32.)

Clinical Remarks.—The sleep-phenomena to which this drug is homœopathic, are symptomatic of other more important derangements of the organism. Among these conditions may be ranked, diminished power of the capillary-vessels and nerves, and as a consequence, diminished animal heat in the tissues supplied by them. (10.)

Head.—Pressure, as if by a weight in the temples. Hammering and pulsating headache, constrictive headache, with shaking chills in the evening; headache after dinner, increasing by walking and in the open air; feeling of soreness of the scalp. (19.) The head feels very heavy. Compression over the eyes, from the temples, from either side of the head, mostly in the evening, sometimes accompanied with a chill, or followed by nightly heat and sweat. Sensation in the head as if the contents of the head were in a vice, with sensation of weight on the top of the head. Stitches in the brain, sometimes with inclination to vomit. Beating in the head, in the vertex, with tumult in the head, or in the morning on waking. Heat in the head; in the forehead, ascending from the stomach. The headache abates when the head rests quietly upon the cushion. (32.)

Clinical Remarks.—It may prove useful against the chronic headaches which attend or follow obstinate or severe fever and ague. (11.)

The Alumina headache resembles that arising from excessive loss

of blood. It has cured throbbing and hammering headaches, brought on by slight exciting causes, occurring in sensitive anæmic subjects, and in those who have become much reduced by copious purulent discharges. (10.)

Face.—Feeling of tension of the skin of the face. Tension in the face with heat; and with drawing in the jaws and cheeks. (19.) Flushes of heat in the face, every day. Roughness of the skin of the face, especially on the forehead. Violent itching of the face. Eruptions; miliary pimples in the face and on the chin, the right side of the nose, left corner of the mouth. Blueish lips during and after the fever, chapped lips. (32.)

Clinical Remarks.—It is homœopathic to the roughness, and pimply condition of the face and forehead, and the fissures and chapping of the lips, which attends disorders of menstruation in many young girls. Also, against the clayey and earthen complexion and eruptions of the face and lips which follow fever and ague. (11.)

Eyes.—Itching and stinging in the inner canthi and lids; pressing and burning pain in the eyes. Nightly agglutination of the eye-lids, with considerable inflammation of the conjunctiva. Burning pain in the eye; obscuration of sight; watery eyes, especially in the morning. Squinting of either eye. (19.) Violent itching of the canthi and lids. Burning in the eyes, early in the morning on waking. Weakness, involuntary descension of and sensation of lameness in the upper lids. Copious lachrymation. Profuse secretion of mucus, especially at night, with dry eye-gum early in the morning. Dim-sightedness as if seeing through mist. (32.)

Clinical Remarks.—It is homœopathic to the weakness of the eyes and chronic conjunctivitis, which is sometimes connected with leucorrhœa and disorders of menstruation. (11.)

It is applicable in chronic inflammations of the lids, occurring in weak, lymphatic females, who have long suffered from leucorrhœa, and diminished and painful menstrual discharges. (10.)

Nose.—Ulceration of the nostrils; they are sore and scurfy, with discharge of a quantity of thick, yellowish mucus. Ulceration of the Schneiderian membrane (Ozœna) with pain in the root of the nose and the frontal cavities. Bleeding at the nose. Stoppage of the nose. Fluent coryza in the left nostril, with stoppage of the right; followed by dry coryza and complete stoppage of the nose. Disposition to catarrh for many years. (32.) Morbid sensitiveness of the nasal mucous membrane to cold. Nasal secretion diminished, and changed to a thick, yellowish mucus. (10.)

Clinical Remarks.—It is homœopathic to ozœna, and chronic catarrh; it should always be borne in mind when Baryta, Calcarea and Aurum fail to cure. (11.)

Alumina 30th has cured morbid sensitiveness of the nasal mucous membrane to cold, dryness and tenderness of the Schneiderian membrane, and itching and obstruction of the nostrils. (10.)

Ears.—Heat and redness of the ears, in the evening. Discharge of pus from the ears. (19.) Heat and redness of the ear for many evenings in succession. Humming in the ears. (32.)

Clinical Remarks.—It is homœopathic to chronic and obstinate otorrhœa arising from a scrofulous affection of the mucous membrane of the ears. (11.)

Mouth.—Feeling of soreness of the buccal cavity. Increased flow of saliva. (salivation.) Constant secretion of either sweet or sour tasting watery saliva. (19.) Dry mouth, early in the morning on waking. Increased secretion of saliva, especially in the afternoon or evening. Constant secretion of saliva. Musty, putrid smell from the mouth. (32.) Dryness and irritation of the buccal mucous membrane. (10.)

Clinical Remarks.—In its primary action it is homœopathic to dryness of the mouth and throat, similar to that which occurs in typhoid fever; but this may be followed by a scrofulous or scorbutic state of these parts, attended with more or less profuse secretion. (11.)

In slight feverish conditions, accompanied by great dryness of the mouth and throat, and a general prostration of the muscular powers of the system, we have occasionally witnessed good effects from a high attenuation of this medicine. (10.)

Teeth.—Swellings about the gums. Ulcer at the gum. Discharging blood of saltish taste. Pains in the teeth on chewing, and soreness at the roots of the teeth. Tearing pains in the molars, extending to the temporal regions. Feeling as if the teeth were too long. (19.) Bleeding of the gums. Boring in both sound and decayed teeth, in the evening, with tearing and digging. The pain is most violent when chewing and pressing the teeth against one another; in such a case, the teeth are painful as if loose, or as if ulcerated about the roots, or as if they were violently pushed into their sockets (this last sensation was experienced in old stumps. (32.)

Clinical Remarks.—It may prove useful against some gum boils, and scurvy of the mouth, but it is more than probable that most of the above so-called pathogenetic effects were accidental as they were felt in decayed teeth and old stumps (11.)

We see no reason why Alumina in a properly attenuated form, may not produce the above enumerated pathogenetic results. If it is true, as is generally conceded, that it exerts a special action upon the capillary system, it is not unreasonable to infer that impressions may be produced upon any tissue supplied with these vessels. Besides we have seen a sufficient amount of corroborative testimony to give full credence to the truthfulness of these pathogenetic phenomena. (10.)

Pharynx and Œsophagus.—Hoarseness, dryness, roughness of the throat, inducing cough. Dry cough with sore feeling in the chest. Continual dry cough, impeding breathing, and causing headache, with inclination of vomiting. Spasmodic constriction, and violent pressing pain during deglutition in the whole length of the œsophagus. Soreness, stinging, roughness and burning in the throat. Dryness and

burning in the throat as if caused by Capsicum. Increased accumulation of thick, tough, tenacious saliva, of a saltish taste, causing continually hawking and spitting. (19.) Tightness from the pharynx down to the stomach, as if the food could not pass through. Inflammation of the fauces, with redness and livid border all round. The pain in the throat is most violent in the evening and at night, less in the forenoon, relieved by warm food or drinks. (32.) Scraping sensation in the larynx. Pain in the thyroid cartilage on touching it. Oppression in the chest. Dyspnœa. Cough with mucous expectoration in the morning. (10.)

Clinical Remarks.—It is homœopathic to a very common and troublesome chronic affection of the pharynx in which this organ looks as if it had been dried, glazed or varnished, with or without considerable redness, and always with great dryness and stiffness of the throat, and more or less hoarseness. (11.)

It is quite homœopathic in dry coughs proceeding from dryness of the mucous membrane of the throat and larynx. Also to slight, hacking, morning-coughs with easy mucous expectoration. (10.)

Taste and Appetite.—Astringent, styptic, bitter, slimy, flat, insipid, metallic taste. Acid in the throat, in the forenoon, or after supper, with subsequent bitter eructations. Entire absence of hunger and appetite, irregular appetite, at times excessive, at times deficient. Hunger without appetite, even when the stomach feels empty. After eating hiccough, noon and evening violent nausea and tremor. (19. 32.)

Clinical Remarks.—It is homœopathic to those forms of dyspepsia in which there is a deficiency of gastric juice and other gastric fluids. This may allow the food to ferment, followed by flatulence and acetic acid pyrosis. (11.)

The gastric secretions are diminished in quantity and changed in quality by this drug. In consequence of this change in the fluids of the stomach, indigestion, acid eructations, nausea, and variable appetite result, as pathogenetic phenomena. Roth and others have repeatedly cured these ailments in weakly and scrofulous subjects, by the higher dilutions of this remedy. (10.)

Gastric Symptoms.—Feeling of coldness in the stomach. Pressure in the stomach, as if from a stone, extending to the throat. Violent constriction in the stomach, extending upwards. (19.) Heartburn after supper; after drinking water; with discharge of water from the mouth; frequent eructations; with oppression of the chest. Sour taste in the evening, with burning in throat like heartburn; acid rising with heat in the mouth. Frequent nausea; especially during the chilly paroxysms; inclination to vomit, with desire to lie down. Nausea, with faint feeling at night, with arrest of breathing. Vomiting of mucus and water, preceded by retching. (32.)

Clinical Remarks.—Teste says he has often derived the greatest advantage from the use of this drug against diseases occurring in aged females, which had apparently been primarily seated in the sexual system, but whose peculiar symptoms had completely disap-

peared with the cessation of menstruation. Generally these were cases of dyspepsia, with rush of blood to the face after eating, tettering redness of the tip of the nose, and upon the knees, sour eructations, vomiting attended with paroxysms of suffocation, and returning every now and then with such violence that the life of the patient seemed in jeopardy; these attacks of cramps in the stomach generally took place in the evening or at night; the vomiting was soon followed by cutting pains, spasms in the bowels, cramps in the legs, and a violent diarrhœa, which relieved the majority of the symptoms. In one obstinate case, Alumina frequently produced a surprisingly speedy improvement; the vomiting and cramps of the stomach were permanently relieved, but the herpetic eruption on the nose, cheeks and chin remained, and Teste says he has never succeeded in effecting a cure of this form of acne, nor does he believe that other practitioners have been more successful. Gratiola, Cicuta-virosa and Carbo-animalis will often do a great deal when other remedies have failed. (11.)

Abdomen.—Painful sensitiveness in the region of the liver, on stooping. Fullness and distention, with rumbling in the intestines. Tearing, pinching, cutting pains in the abdomen, ameliorated by warmth. (19.) On waking up, pinching in the abdomen and tenesmus; she was scarcely able to reach the closet, where she had to lean against the wall in a fainting fit; she had no stool, but the pain in the abdomen ceased after a good deal of tenesmus. Colicky pinching, and tearing in the abdomen, with chilliness in the abdomen, relieved by warm clothes. Colic, attended with flatulency. Violent cutting and rumbling in the whole abdomen; the pain rises up to the stomach; this is followed by an intensely painful oppression of the chest, which arrests the breathing. Sudden sensation as of burning in the abdomen. Pain in the region of the kidneys. Lancinations and burning in the lumbar regions. Pressing in both lumbar regions towards the sexual organs in the evening. Great distention of the abdomen, attended with rush of blood to the chest, after dinner, for several days. Great distention of the abdomen, attended with empty eructations and two loose stools, without relief. (32.)

Clinical Remarks.—See anus and stool.

Stool and Anus.—The rectum is inactive, as if it were deficient in peristaltic motion, and had not strength enough to press the contents out. Tenesmus without stool. Deficiency of peristaltic action of the intestines. Bearing down, during an evacuation; the stools are very hard, knotty and scanty. Discharge of blood from the rectum, during and after stool. (19.) Involuntary emission of urine, occasioned by bearing down in order to evacuate the intestines. Stools too scanty. Stools covered all over with whitish slime, hard, preceded by oppression in the region of the stomach, which ceases immediately after the evacuation. Diarrhœa, succeeding colic. Diarrhœa, attended with tenesmus. Chills over the whole body during an evacuation, in the evening. Pricking in the orifice of the rectum,

after a difficult evacuation. Itching and burning at the orifice of the rectum; not relieved by scratching. (32.) Discharge of prostatic fluid during a hard stool. Itching of the anus. (10.)

Clinical Remarks.—Alumina is one of the most homœopathic remedies against constipation from very great dryness of the bowels; it should be used more frequently than Nux and Sulphur, as should Calcareæ, Plumbum, Baryta-carb., Bismuth, &c. (11.)

Dr. Picinius has used it in *Diarrhœa acida*, and dysenteries, both grave and slight. According to Scila, Alumina is not exceeded by any other ant-acid remedy for celerity and certainty of action. Erdmann of Dorpat always used it with the greatest confidence in the diarrhœas of children arising from acidity in the *prima-viæ*. Dr. Wiese of Thorn gave it successfully in seven cases of diarrhœa in children when caused by errors in diet, or when the presence of acidity of the stomach and bowels was more or less evident. Scila recommends it after four years' experience not only in infants against vomiting arising from acidity and obstinate greenish diarrhœa, but also in children up to four years of age. He never gave it without benefit, and in the majority of cases it alone sufficed to effect a cure. In several old and neglected cases in which the pains were very great, the remedy had to be continued for fourteen days before a cure was effected. It is said to be far superior to Magnes.-carb., and Calcareæ. (44. 11.)

Urinary Organs.—Increased secretion of watery straw-colored urine. Pressure upon the bladder. (19.) For a whole day there in no evacuation, either of urine or fæces. Pale urine, with turbid sediment. White turbid urine, as if chalk had been stirred with it. Burning in the urethra when urinating. (32.) Frequent desire to urinate during the night. Pain in the kidneys during repose. (15.)

Clinical Remarks.—It may prove useful in some scrofulous affections of the mucous membranes of the urethra, bladder, ureters and pelves of the kidneys; also in phosphatic diseases of the urinary organs. (11.)

In one patient, an aged gentleman, who had long been troubled with frequent desire to urinate during the night, in consequence of a paralytic attack, we witnessed material benefit from Alumina 30th, every night and morning continued for one week. In less than three weeks from the first dose, the difficulty was removed. Under its use his general health greatly improved, and his appetite and spirits returned to their original condition. (10.)

Male Sexual Organs.—Tickling of the sexual organs and the thighs, Painful contraction in the right spermatic cord; the testicle of the right side is drawn up simultaneously; and is also very sore and painful. The left testicle is hard and indescribably painful to the touch. Want of sexual instinct. Erections. Frequent and violent erections and involuntary emissions of semen. Involuntary emissions. (32.) Augmentation of the sexual appetite. (65.)

Clinical Remarks.—It is homœopathic to enlargement and induration of the testicles and to chronic gonorrhœa. (11.)

It may prove beneficial in involuntary emissions of enfeebled and nervous patients, and in cases of increased sexual desire, but with diminished executive power. (10.)

Female Sexual Organs.—Menses appearing earlier than usual, but less in quantity. (19.) The menses are scanty, and last only three days. Six days before the appearance of the menses; she has a copious flow of mucus from the vagina accompanied by tremor, lassitude, and a sensation as if every thing were falling out of her abdomen. During the menses pinching in the abdomen and greater lassitude than usual; bloated abdomen and too large a flow of blood. The menses appears four days too soon, preceded by violent headache, which ceased on the appearance of the menses. After the menses had ceased to flow, the body and mind felt exhausted; a little work and moderate walking laid her prostrate, and made her feel low-spirited. Leucorrhœa with which she had been troubled, ceased. Leucorrhœa. Abundant leucorrhœa. (32.) Menses diminished in quantity. Painful menstruation. (65.)

Clinical Remarks.—It is probably more homœopathic to amenorrhœa than to menorrhagia, although if *Catechu*, which is a powerful astringent, will produce menorrhagia, so may *Alumina*.

Roth prescribes it in scanty and painful menstruation, and in copious mucous leucorrhœa. (10.)

Rademacher says *Catechu* has been recommended against menorrhagia; he not only does not believe it useful, but thinks it more apt to cause than cure it. Thus he noticed in a peculiar form of nervous fever when menstruation sat in at the usual time and even was not excessive, still the women would become worse and often fell into a stupid and delirious state. He generally found *Catechu* a useful remedy except in adult females, in whom it brought on menstruation from eight to fourteen days before the regular time, and in excessive quantities. He once gave it to a young woman with chronic diarrhœa, and even then the menses sat in eight days too soon.

This seems to be an extraordinary effect of *Catechu*, as this remedy is said to be one of the most powerful and certain of the vegetable astringents, and contains a large proportion of Tannin, viz., from 97 to 109 parts in 200. (11.)

Larynx and Trachea.—Hoarseness. Dry cough with feeling of soreness in the chest. Long-lasting, dry cough, almost causing vomiting and impeding respiration. (19.) Irritation in the larynx, inducing cough. Violent, short, dry cough, which lasts a good while, attended with sneezing; and tearing, lancinating and pinching pain from the nape of the neck to the right axilla. Continued dry cough, attended with vomiting and arrest of breath, and lancinating pain, extending from the left side of the abdomen to the hypochondrium and the pit of the stomach. Cough, with copious expectoration, especially early

in the morning. Feeling of temporary constriction of the throat. (32.) Scraping sensation in the larynx. Oppression of the chest, with pain in the thyroid cartilage on touching it. Morning cough with easy expectoration. (15.)

Clinical Remarks.—Teste says he has seen a few doses of Alumina excite and maintain for two months (?) in succession a tearing cough, every paroxysm of cough being accompanied by involuntary emission of urine, which reduced the patient to despair. Every physician in full practice must have met with such cases in which no Alumina had been given. It is homœopathic to the dry irritating cough which occurs in the first stage of phthisis from scrofulous irritation of the pharyngeal and laryngeal mucous membranes. To hoarseness from dryness or even follicular ulceration, or thinning and absorption of the mucous membranes of the air-passages. (11.)

It is useful in chronic laryngitis, with morning cough, easy mucous expectoration, scraping sensation on coughing, sensitiveness of the larynx to the touch, and hoarseness. Also in coughs caused by dryness of the mucous membrane of the larynx and trachea. (10.)

Chest.—Oppressive constriction of the chest. Sharp stitches in the chest, especially in the upper parts. Palpitation with irregular beats of the heart. (19.) Stricture across the chest, accompanied by a feeling of apprehension, when stooping in sitting; it passes off on raising the head in the afternoon. Oppressive pain in the chest. Pressure in the chest, followed by empty eructations, which do not produce any relief; the pressure sometimes reaches as far as the back, and increases by walking in the forenoon. Violent oppressive pain in the chest at night. Erratic stitches in the chest, sometimes aggravated by breathing, sometimes burning; lancination passing like lightning from the right loin to the left side of the chest, through the pit of the stomach, when breathing; when stooping, from the left side of the abdomen to the middle of the chest, at every inspiration. Palpitation of the heart every day on walking. (32.)

Clinical Remarks.—It is homœopathic to slow and sneaking dyscratic irritations and inflammations about the lungs and air-passages, especially when the mucous membranes and follicular and glandular parts are especially affected. In the first stage of tubercular consumption, when the cough is dry and hacking, or almost incessant. (11.)

Back.—Pain as if bruised, in the small of the back and in the back. Stitches and cutting in the scapulæ, attended with chilliness, two days in succession. Violent pain all along the back; stitches and twitches, so that she is unable to stoop, or to raise anything with her hand; increased by breathing. (32.) Pain in the kidneys during repose. (15.)

Clinical Remarks.—It is homœopathic to a weakened and relaxed condition of the kidneys, which now and then remains after acute nephritis. It is also applicable in dull pains in the lumbar region, which are chiefly experienced when sitting or lying in bed. (10.)

Neck.—Itching in the nape of the neck; violent itching of the neck

and chest, as if bitten by fleas; without any visible eruption; on touching the skin, hard blotches are felt here and there. Stitches in the glands of the right side of the neck. Drawing and pressure in the glands of the left side of the neck. Swelling of the glands. Stiffness of the muscles of the neck, so that she cannot turn her head to the left side. (32.)

Clinical Remarks.—It is homœopathic to acnous and urticarious eruptions on the nape and back. Also to chronic enlargement and induration of the cervical glands. (11.)

Superior Extremities.—Violent tearing from the shoulder down to the fingers. (19.) Lameness and pain as if bruised in the arms, changing from side to side. Burning sensation and tension of the upper arms and fingers, and of the left elbow, as from a red-hot iron. Lancinations in the upper arm and the elbow; the pains seems to be in the bone. Gnawing behind the finger-nails, attended with tingling all along the arm, as high up as the clavicle. Swelling of the fingers. The tips of the fingers are disposed to ulcerate. (32.) Pain in the arms when raising them, or when keeping them extended in bed. Lancinating pains in the carpal articulations when using the hands. Paralytic weight in the arms. Cracks and fissures in the hands. (65.)

Clinical Remarks.—It is homœopathic to scrofulous irritation of the nerves and fibrous tissues which simulate rheumatic pains; also to a chronic tendency to ulceration of the hands and fingers, and to subcutaneous corrosion of the cellular tissue, and to superficial felons. (11.)

It has been employed with advantage in obstinate cases of chronic periostitis, which had resisted the action of Silicea, Mercurius, and other remedies. It has also cured deep-seated pains of the legs and arms occurring in aged, gouty, and nervous subjects. (10.)

Inferior Extremities.—Tearing through the whole of the lower extremities. Tired feeling and heaviness of the legs. Tearing, stinging pain in the knees, with a feeling as if swollen. Tingling, itching, prickling in different parts of the extremities. (19.) Pain in the left hip as if bruised. Tearing in the thighs and legs, when sitting and lying down, especially at night. Pain in the patella on pressing the hand upon it, or on bending the knee. Pain in the sole of the foot, on stepping upon it, as though it were too soft and swollen. Herpes between the toes. (32.) Numbness and stiffness of the legs during the night. Pain and sense of fatigue in the tarsal articulations when sitting. Burning sensation in the lower part of the toes. (65.)

Clinical Remarks.—It is homœopathic to the pains and weaknesses in the back and legs which attend phosphatic diseases of the urinary organs; also to swelling and pains in the legs and feet from atheromatous disease of the coats of the arteries; to rhagades, fissures, herpes and tendency to ulceration about the toes. (11.)

Numbness and stiffness of the legs on waking from sleep during the night, and weariness and paralytic weight of the legs, have sometimes been relieved by high attenuations of this medicine. (10.)

General Symptoms.—Sticking, itching, crawling as if from ants in different parts of the body, mostly disappearing after scratching. Great lassitude and prostration, especially of the lower extremities. Most of the symptoms appear after dinner, improving on exercise and in the open air. (19.) Feeling of constriction, particularly in the internal organs. Scrofulous affections of the mucous membranes. Involuntary convulsions here and there; twitching in the limbs. Great depression of strength. Great lassitude of the whole body, with chilliness and headache. (32.)

A M B R A - G R I S E A .

GREY AMBER.

AUTHORITIES.

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GENERAL REMARKS.

By some the Grey Amber is supposed to be a tallow-like product from the gall-bladder of the whale; according to Pereira it is procured from the sperm whale and seems to be the indurated fæces (perhaps somewhat altered by disease) of the animal. Mr. Beale collected some of the semi-fluid fæces, and found that the dried mass had all the properties of Ambergris. It has a pleasant musk-like odor, which is supposed to be derived from the squid, or *Sepia moschata*, on which the whale feeds; in support of this opinion it must be mentioned that the horny beaks of this animal are found imbedded in the masses of Ambergris. Swediaux was the first to trace its origin to the sperm whale; Lecluse was the first to suggest that it might be hardened and altered fæces; Home the first to hint that it might be a hardened and altered secretion from the liver of the whale, or a kind of gall-stone; Oken supposed that it was indurated bile-resin, which opinion is strengthened by the chemical analysis of Pelletier and Caventon; while J. J. Férey conjectured that it was a species of adipocere arising from the decomposition of dead *Sepia-octopodia*, and the other kinds of *Sepia* which emit an amber or musk-like odor; and bases his opinion on the fact that the beaks and bones of those cuttle-fish are found in ambergris; but as these are also the most common food of the whale, it may have a double origin, one from the fæces of the whale, and the other from the spontaneous decomposition of dead cuttle-fish.

When genuine, Ambergris has a peculiarly pleasant odor, not easily described or imitated, and which is exceedingly diffusive, especially

in solution, so that a very minute quantity is perceptible even when mixed with other perfumes; a grain or two rubbed down with sugar, and added to a hogshead of claret is very perceptible in the wine, and gives it a flavor, by some considered as an improvement.

Boswell noticed, after taking thirty grains, quickness of the pulse, increase of muscular power, and of sight and hearing; also greater activity of mind, and of the sexual power. It was formerly much celebrated as a stimulant and anti-spasmodic, supposed to produce excitation and strengthening of the whole nervous system, and even to prolong life. In the east, it has long been used as an aphrodisiacum; hence its action may be the opposite in this respect of that of *Agnus-castus*, *Conium*, *Camphor*, &c. According to Noack and F. Hofstetter, *Ambra* is said to exert a remarkably specific action on the organ of hearing, and as curative effects, old school physicians have noticed increase of muscular power, relief from intellectual weakness, and mental depression, increased power of seeing and hearing, and increase of the sexual power and fluids. Its action has been compared by old school physicians to that of *Musk*, *Castor*, *Coffee*, *Valerian*, &c., &c. It had also an ancient reputation for causing the re-appearance of suppressed eruptions, such as itch and herpes. On account of its stimulating properties *Chaumeton* and *Cloquet*, were led to give it in typhus fever.

Musk according to *Pereira* is an irritant to the stomach, a stimulant to the brain and vascular system, and afterwards proves narcotic; for it causes eructation, sense of weight in the stomach, decrease or increase of appetite, gastralgia, nausea, vomiting and diarrhœa; also frequency and fullness of the pulse, heaviness of the head, vertigo, headache, predisposition to epistaxis; and occasionally it brings on the menses; these effects are followed by disposition to sleep, heaviness of the whole body, and lastly long and deep sleep. In large doses it may bring on faintness, trembling in the limbs, and even convulsions. Yet it is regarded by old school physicians as a most powerful anti-spasmodic, and nervine.

Valerian causes headache, mental excitement, flashes of light before the eyes, scintillations, giddiness, restlessness, agitation, and cold spasmodic movements; in some it causes great agitation, and heaviness of spirits; it accelerates the pulse, and augments the heat of the body. It intoxicates cats, who are very fond of it, rolling themselves over the ground in outrageous playfulness, being violently agitated. Yet it is used to soothe nervous excitement, and as an anti-spasmodic. (11.)

General Symptoms.—Talking irritates her, she is attacked with trembling through the whole body, especially in the lower extremities, and has to be alone for some time in order to rest herself. The symptoms decrease by walking in the open air, but return when sitting. Profuse sweat, when walking, mostly on the abdomen and the thighs. Sweat over the whole day. Itching over the whole body. The itch

is reproduced upon the skin, with a good deal of itching. Tetters are reproduced. Early, on waking up, the skin feels numb and is insensible as far as the knees, without being cold; the hands have but an indistinct sensation; the skin seems to have gone to sleep, but there is no tingling. Twitching in the limbs, and coldness of the body at night. When walking in the open air, one feels an agitation in the blood; the rapidity of the circulation increases, accompanied by greater weakness of the body. (1.) Spasms and convulsions of the muscles. Tearing or crampy pains in the muscles; aching pains in internal organs; single parts easily go to sleep. Jerks and twitchings of the limbs, the whole night, with coldness of the body. (32.)

Mind and Disposition.—Uneasiness the whole day, the chest feeling oppressed. The mind feels uneasy and agitated. Hurriedness in performing some mental labor. Irritated mood. She is irritated, loquacious; talking fatigued her, unable to sleep at night, headache as if a heavy load on her head; oppression of the chest, had to sit up in bed, and was attacked with anguish and sweat all over. Distorted, grimaces, diabolical faces crowd upon his fancy; he cannot get rid of them. Anguish and tremor. Great depression of spirits. Despair. Constant alternation of depression of spirits and vehemence of temper. (1.) Anxiety in the evening. (32.)

Clinical Remarks.—It is homœopathic to despondency occurring in persons of a dry, bilious temperament. It is also applicable in great depression of spirits, and anxiety which are sometimes met with in highly nervous and sensitive organizations. (10.)

Sensorium.—Feeling of faintness. Vertigo and a feeling of weakness in the stomach. Failing of strength; the knees give way. Dullness of the head, every morning the head feels muddled as after nightly revelling, in the occiput; tensive; stupefying; great weakness of the head, with chilliness about the head, or vertigo. He feels constantly as if dreaming; stupid; is not able to reflect upon any thing properly. Vertigo, violent, even dangerous; in the forenoon and afternoon, when walking in the open air. (32.)

Clinical Remarks.—It has been successfully prescribed in stupid, dull conditions of the mind which often exist after excessive mental excitements, protracted grief, anxiety, &c. It has cured vertigo, with great nervous debility, sense of fatigue and general prostration of the forces of the system. (10.)

Head.—Violent vertigo. Uncommon, even dangerous vertigo. He is always as if he were in a dream. Great weakness of memory. Headache every morning; the head feels empty and desolate. Ob-tusion of the occiput. Oppressive headache in the forehead. Con-gestion of blood to the head for two days. Traction or tearing in the head, to and fro. When making an exertion, he experiences a lancinating and cutting headache. Falling off of the hair. Headache becomes tearing, and leaves behind it a certain obtusion of the head. (1.) Tearing in the head; on the top of the head and in the sincipi-

put, with paleness of the face and coldness of the left hand. Stitching and darting pains through the head. (32.)

Clinical Remarks.—We have witnessed good effects from Ambra in cases of chorea accompanied by fits of severe headache in the vertex, occiput, and temporal regions. Also in neuralgic headaches of hysterical females. (10.)

Eyes.—Tearing pain and lachrymation of the eyes. Pressure upon the eyes, which can only be opened with difficulty; pain in the eyes, as if they had been closed too firmly, especially early in the morning. Distended veins of the white of the eyes. Itching of the eye-lid, as if a sty would form there. Great obscuration of sight. (1.) Inflammatory redness of the white of the eye and injected condition of the vessels. (32.)

Clinical Remarks.—Ambra apparently afforded decided benefit in a case of incipient amaurosis and partial loss of hearing in an old gentleman whose nervous system had become much impaired by grief for a domestic affliction. Under the use of this remedy at the 12th dilution both difficulties were nearly removed. (10.)

Ears.—Tearing in the right ear early in the morning, and frequently in other places. Roaring and whistling in the ear, in the afternoon. Snapping, as of a spark from the electric machine, and noise as when winding up a watch. Deafness of one ear. Hearing decreases every day, five days in succession. Violent tearing pain in the lobule and behind it. (1.) Tingling itching and titillation of the ears. (32.)

Clinical Remarks.—It has cured partial deafness, which had been preceded and accompanied by ringing in the ears, and great general debility. (10.)

Nose.—Cramps of the right wing of the nose, towards the malar bone. Great dryness of the inside of the nose, although air passes through easily. Dried blood gathers in the nose. Bleeding from the nose early in the morning. (1.) Frequent sneezing, with tingling and dryness of the nose. Stoppage of the nose. (32.)

Face.—Spasmodic trembling of the muscles of the face. Flying heat in the face. Jaundice-colored face. Pimples and itching in the whiskers. Tension of the cheek, as from swelling. Tearing in the upper part of the face, particularly near the right wing of the nose. (1.) Cramps of the lower lip. (32.)

Clinical Remarks.—A middle aged lady, of a full habit, and predisposed to apoplexy, who had long been troubled with frequent flushes of heat in the face and head, was cured in three weeks by the 30th dilution of this medicine, a dose being taken morning and evening. (10.)

Jaws and Teeth.—Spasm of the lower lip. Stitching-aching in the jaws. Pain in the jaws, as if they were being screwed together, or asunder. Considerably swollen and painful gums. Drawing pain, sometimes in the teeth of the right, sometimes in those of the left side. Bleeding of the teeth. (1.)

Mouth.—Fetid odor from the mouth. Tongue, mouth and lips feel quite numb and dry, early on waking up, accompanied by a total want of thirst for several days. Smarting, and sensation of excoriation, in the interior of the mouth; pain prevented her eating anything acid. Feeling of contraction in the salivary glands. (1.) Vesicles in the mouth, which occasion a pain as if they had been caused by a burn; little blotches under the tongue resembling small vegetable growths and feeling sore. (32.)

Clinical Remarks.—It is homœopathic to bad breath arising from imperfect digestion. The accompanying symptoms are usually, nausea, sense of weight at the pit of the stomach, heartburn, empty or acid eructations. (10.)

Throat.—Rawness of the throat, as from a cold, for some days. Tearing in the interior of the throat, and in the back part of the fauces. Sore throat, as if something impeded deglutition. Secretion of mucus in the throat, with roughness and rawness. (1.)

Clinical Remarks.—We have cured with Ambra, spasmodic choking in the throat when attempting to drink, in patients affected with hysteria and cholera. (10.)

Gastric Symptoms.—Frequent, empty eructations. Violent eructations after dinner. Frequent, sour eructations. Heartburn, with suppressed eructations, when walking in the open air. Bitter taste in the mouth, early when waking up. Nausea after breakfast. (1.) Nausea and vomiting. (32.)

Clinical Remarks.—In weak and nervous persons who suffer from indigestion, with distress in the stomach after eating, nausea, empty, or acid eructations, heartburn, bitter or pasty taste in the mouth, and depression of spirits, this is a remedy of considerable value. It removes both the dyspeptic symptoms, and gives tone and strength to the nervous system. (10.)

Stomach and Hypochondria.—Burning in the stomach. Qualmishness about the stomach. (1.) Feeling of weakness in the stomach, obliging him to lie down, accompanied with vertigo. Pressure at the stomach, with tension or stitches below the pit of the stomach at night; spasm of the stomach. Pressure in the region of the liver. (32.)

Clinical Remarks.—It has cured burning and slight spasmodic pains in the stomach, sense of tightness over the region of the stomach and liver, sinking and weakness at the pit of the stomach. (10.)

Abdomen.—Pressure below the scrobiculus cordis and in the hypogastrium, from time to time, also at night. Pressure in the epigastrium, hands and feet being cold. Aching in a small place in the right side of the abdomen, in the region of the liver; the pain is not felt when touching the parts. Tension and inflation of the abdomen after every meal, even every time he swallows a drink. Clawing pain in the right iliac region. First clawing pain in the abdomen,

then, a little cutting in the epigastrium, which goes off by an eructation. Incarceration of flatus. Violent colic in the evening. Colic, with a soft stool, early in the morning, two mornings in succession. Colic, with diarrhœa. (1.) Violent spasm in the abdomen. Cutting in the abdomen; very violent in the evening; after midnight, with general sweat; accompanied with loose diarrhœic stools, early in the morning. (32.)

Clinical Remarks.—It is appropriate in cases of distention of the abdomen, cramp-like pains and pressure in the abdomen, tightness extending from the stomach and liver, over the entire abdomen. (10.)

Stool and Anus.—Tenesmus of the rectum. Scanty stools. Constipation. Itching of the anus. Stitches of the rectum. A quantity of blood is passed with the soft stool. Pressure deep in the hypogastrium after the evacuation. (1.) Constipation, scanty stools, irregular, intermittent stools, sometimes every other day. (32.)

Urinary Organs.—Pain in the rectum and simultaneously in the bladder. The urine is turbid already while being emitted, yellow-brown; and formed a brown sediment. Bloody urine. Diminished secretion of urine. Frequent micturition at night. Urgent desire to urinate, early after rising, he often cannot retain his urine. Burning in the orifice of the urethra and rectum. Twitchings in the urethra and testicles. Tearing in the glans. (1.) During micturition: burning, smarting, itching and titillation of the pudendum and the urethra. (32.)

Genital Organs.—Pain in the glans, as from ulceration. An itching pimple on the male parts of generation. Internal burning in the region of the seminal vesicles. Burning, biting, tickling and itching of the pudendum and the urethra during micturition. Swelling, soreness, and itching of the labia pudendi. Itching of the glans, which continues when sitting, lying, standing, or walking. Vehement, voluptuously-delightful feeling in the interior of the genital organs, without any considerable erection or irritation of the external organs; this feeling continues for hours. The menses appear too early. Hæmorrhage from the uterus. Profuse leucorrhœa at night. Discharge of blueish-white clots of mucus from the vagina. Leucorrhœa consisting of thick mucus, increasing from day to day, each discharge being preceded by a stitch in the vagina. (1.)

Clinical Remarks.—Roth commends it against mild leucorrhœa, only during the night, with stitches in the vagina before the discharge. It has occasionally been employed as an aphrodisaic, but with doubtful success. (10.)

Larynx and Chest.—Accumulation of a greyish mucus, difficult to cough up, with scraping in the throat. Burning titillation from the larynx to the abdomen. Tickling in the throat inducing cough. Cough, excited by a scraping sensation in the throat, only at night; occasioned by an excessive irritation; every evening, with pain under the last ribs, as if something were torn off. Deep, dry cough, with

confluence of water in the mouth, and subsequent scraping in the throat. Spasmodic cough. (32.)

Clinical Remarks.—In spasmodic, night coughs proceeding from irritation and tickling of the throat, this remedy is quite efficacious. Also in the short, hacking coughs which are often observed in hysterical females. In a few instances we have used it successfully in severe nightly paroxysms of whooping-cough. (10.)

Chest.—Cough only at night, produced by an excessive irritation in throat. Accumulation of greyish phlegm in the throat, difficult to raise, with rawness of the throat. Violent convulsive cough, accompanied by frequent eructations and hoarseness. Deep, dry cough, with accumulation of water in the mouth, and subsequent rawness in the throat. Burning in the chest. Stitch in the chest, extending to the back. Violent, dull stitch in the right mamma, intercepting the respiration. Wheezing in the chest. Oppression at the chest. Oppression at the chest, with much uneasiness the whole day. Tightness of chest; she cannot breathe deeply, and yawning cannot reach its natural termination. Anguish about the heart, increasing even to the extent of arresting the breath, with flying heat. Palpitation of the heart, when walking in the open air, with paleness of the face. Violent palpitation of the heart, with pressure in the chest. Pressure in the præcordial region. Aching pain in the chest. Rheumatic pain on the right side of the chest, below the arm. Tearing pressure in the left side of the chest. (1.) Nightly tremor of the chest. (32.)

Clinical Remarks.—It is indicated especially in oppression and tightness of the chest, increased by the slightest exertion; in asthmatic respiration; shortness of breath, with great general debility, in scrofulous or cachectic subjects; also in accelerated circulation, palpitation of the heart, and prostration coming on after exercise in the open air. (10.)

Back.—Violent pressure in the lower part of the small of the back. Single, violent, sharp stitches in the small of the back, increased by the slightest motion. Painful tension in the muscles of the loins. Rheumatic pain in the back, on the right side. Pain in the back, as if the intestines were being compressed, with a heaviness in the back, as if he were not able to right himself. Stitches, burning in the scapula. Rheumatic pain in the right scapula. Drawing ache in the nape of the neck. Tearing in both shoulders. (1.)

Superior Extremities—Tearing in the left shoulder-joint. Feeling as if sprained, paralysed. Numbness of the arms. Twitching in the arm. Tearing in the elbow and forearm. Arms and hands go to sleep at night. Cramps in the hands; fingers drawn crooked. Temporary paralysis of the hands. Painful coldness of the hands. Icy coldness of the hands in the evening. Tearing, stinging, stitches in the hands and fingers. Traction in the fingers and the thumb. (1.)

Clinical Remarks.—We have seen the following group of symptoms gradually disappear under the use of Ambra; great general de-

bility and nervousness, habitual coldness of the hands, numbness and prickling of the arms and hands, occasionally spasmodic pains first in the hands, and afterwards extending up the forearms, tremulousness of the arms and legs on speaking, or making any exertion. (10.)

Inferior Extremities.—Tearing in different regions of the hip. Tearing in the left leg. Rheumatic tearing in the right leg. Heaviness of the legs. Tension in the thigh, as if the tendons were too short, especially when walking. Feeling of numbness in the limbs. Temporary paralysis of the knee. Cold feet. Cramps in the legs and almost every night, cramps in the calves. Tingling in the feet, they feel numb; after rising, he felt like fainting; darkness before the eyes; he could not remain up; he had to vomit and lie down again. Arthritic pain the articulations of the foot. Stiffness of the feet; they feel weary and exhausted. Itching and burning of the soles of the feet; not removed by scratching. (1.)

Clinical Remarks.—Ambra has proved curative in general loss of muscular strength and habitual coldness of the legs, frequent cramp-like pains in the calves of the legs and thighs, legs often feel as if asleep, trembling of the legs after walking, or making any exertion. (10.)

Skin.—Numbness of the skin all over, as if gone to sleep, early in the morning on waking. Itching and burning of many places of the skin, as if from the itch; causes suppressed itch and herpes to reappear upon the skin. Burning herpes. Dryness of the skin. (32.)

Clinical Remarks.—It has cured prickling sensations in the skin, accompanied by coldness and diminished sensation of the affected part. It has afforded temporary relief in habitual and long-standing itching of the skin. (10.)

Fever.—Chilliness with great weariness, as if he would go to sleep, four forenoons in succession, going off after dinner; commencing in the morning with numbness and pain about the head, which goes off in the open air; with headache after diarrhœic stools; at night coldness of the body and twitches of the limbs, with restless, or internal chilliness; chilliness of single parts, followed by heat in the face. Flushes of heat with anxiety about the heart. Profuse night-sweat, two nights in succession. (32.)

Sleep.—Uneasy sleep with anxious dreams. Vexatious, anxious dreams and talking while asleep, for eight nights. Uneasy sleep at night, owing to coldness of the body and twitching in all the limbs. Startings as with fright in the evening, when falling asleep. (1.) Drowsiness in the day-time; inclination to stretch one's limbs. Restless night-sleep, full of dreams. On waking early in the morning, great weariness, especially in the upper part of the body, dullness of the head, nausea in the pit of the stomach. (32.)

Clinical Remarks.—Perry has used it successfully in cases of sleeplessness from nervous irritation, with headache, anxiety, lassi-

tude, general oppression of the system, and copious sweats. He also commends it in disturbed and unrefreshing sleep, causing the patient to wake up much fatigued, and with an indisposition to make the slightest effort. (10.)

AMBRA-SUCCINUM.

Ambra-succinum, or Ambre-jaune, as it is called by the French, is a kind of fossil resin, derived probably from extinct coniferæ, occurring generally in small detached masses, in alluvial deposits, in different parts of the world. It is found chiefly in Prussia, and also occurs in considerable quantities near Catania in Sicily. It is most frequently associated with lignite, and sometimes encloses insects and parts of vegetables. In the United States it was found in Maryland at Cape Sable, near Magorhy River, by Dr. Troost. In this locality it is found associated with iron pyrites and lignite. It has also been discovered in New-Jersey.

Amber is a brittle solid, generally in small irregular masses, permanent in the air, having a homogenous texture, and vitrious fracture, and susceptible of a fine polish. It becomes negatively electric by friction. Its color is generally yellow, either light or deep; but it is occasionally redish-brown, or even deep-brown. It has no taste and is inodorous unless heated, when it exhales a peculiar, aromatic, not unpleasant smell. It is usually translucent, though occasionally transparent or opaque. Its specific gravity is about 1.07. Water and alcohol scarcely act on it. When heated in the open air it softens, melts at 548° , smell, and at last inflames; leaving after combustion, a small portion of ashes. Subjected to distillation in a retort furnished with a tubulated receiver, it yields, first, a yellow acid liquor; and afterwards a thin yellowish oil, with a yellow waxy substance, which is deposited in the neck of the retort, and upper part of the receiver. This waxy substance exhausted by cold ether of the part soluble in that menstruum, is reduced to a yellow micaceous substance, identical with the chrysene of Laurent. A white crystalline substance, identical with the idrialine of Dumas, may be separated from the micaceous substance by boiling alcohol. Both chrysene and idrialine are carbo-hydrogens. As the distillation proceeds, a considerable quantity of combustible gas is given off, which must be allowed to escape from the tubuline of the receiver. By continuing the heat the oil gradually deepens in color; until towards the end of the distillation, it becomes black and of the consistence of pitch. The oil obtained is called oil of amber, and the acid liquor is a solution of impure Succinic-acid. When Amber is distilled repeatedly from Nitric-acid, it yields an acid liquor, from which after it has been neutralized with Caustic-potassa; ether separates pure Camphor. Cam-

phor is also obtained by distilling to dryness powdered Amber, with an extremely concentrated solution of Caustic-potassa. (7.)

General Remarks.—In epilepsy, Amber was at one time much esteemed. It is well spoken of by Riverius, Beattie, Cullen and others. It has now fallen into disuse. In hysteria and some nervous and spasmodic affections it was employed, but is now rarely prescribed. (44.)

Chest.

Clinical Remarks.—In whooping-cough it was formerly employed. Dr. Alnatt considers that he has seen benefit from the application of a liniment, composed of equal parts of Succinic-oil and spirits of Hartshorn, well rubbed into the spine, night and morning. The benefit derived was probably due to the friction employed. (44.)

AMMONIUM-ACETICUM.

ACETATE OF AMMONIA. (*Spiritus-Mindereri.*)

AUTHORITIES.

Waring's Therapeutics. (44.) Pereira's Mat. Med. (3.) Wood and Bache's Dispensatory. (7.) Vogt's Mat. Med. (20.) Dierbach's Mat. Med. (6.) Peters. (11.) Frank's Magazine. (4.)

GENERAL REMARKS.

The experience with this medicine is almost wholly clinical. It is usually regarded as refrigerant and diaphoretic, when given in doses of $\mathfrak{z}\text{ij}$. to $\mathfrak{z}\text{viij}$. two or three times daily. Externally it has been applied as a lotion and collyrium. (44.) Dierbach regards it as the only specific diaphoretic remedy, with the exception of Dover's powders; he regards it as one of the most powerful and certain remedies for the promotion of transpiration and perspiration. It is a very great favorite and unusually frequently used remedy in the dominant school, being used almost universally for the production of crises through the skin in febrile diseases, although it is less useful in the commencement of severe attacks when the fever and inflammation are violent, than when these have already somewhat abated and a skin crisis is about to occur, or as Wendt says, when there is a *cutis-mollis et tractabilis*. As it not competent to the removal of any severe febrile or inflammatory disease it is only used in the milder forms of synochal, irritative, typhoid fevers, and rheumatic fevers, and then generally has to be aided by other remedies; in gastric and bilious fevers after sufficient evacuations have been supposed to be effected; but more especially in catarrhal rheumatic fevers, as these are supposed to be attended with check of perspiration; it has also been used in rheu-

matic anginas, rheumatic pleurisies and pneumonias; in exanthematic fevers, such as measles, scarlet fever and small-pox, to aid the outbreak of the eruption when this is retarded. In dropsy from checked perspiration, or injury of the skin, such as occurs after scarlet fever and in Bright's disease.

On account of its ammoniacal basis it is supposed to approach somewhat in its action that of the exciting or stimulating remedies, although it causes so little heat of skin and activity of pulse that it has been regarded as the most excellent *diaphoreticum non-calidum*; but still it is regarded as better adapted to feeble constitutions, and to typhoid and debilitated states than most other allopathic antiphlogistic remedies.

On the other hand, the neutralization of the Ammonia by means of the Acetic-acid renders it somewhat similar in its action to that of the neutral salts, although it is not so depressing and debilitating.

Again, like vinegar and some other acids it is supposed to exert a peculiar action upon the biliary and urinary organs.

This remedy was first made known to the medical public in 1621 by RAIMUND MENDERER, a physician in Augsburg, but it did not receive much attention until Boerhaave noticed it in 1732, in his *Elementis Chimiæ*; it next found entrance into the Edinburgh pharmacopia in 1756. But singularly enough, some able writers on the *Materia Medica*, such as Sobernheim suppose that Boerhaave first discovered the remedy, and worst of all that Menderer was a Scotch physician who robbed him of the credit due to him. (11.)

ON THE NERVOUS SYSTEM.

Nerves of Motion.—This remedy is supposed not to exert the same irritating action upon the spinal system and nerves of motion which the other ammoniacal remedies are known to do. Thus, Christison says that the second group of the order of alkaline poisons including Ammonia with its salts and the sulphuret of potassa have a double action on the system, for beside their local effects, they produce through the medium of the blood a disorder of some part of the nervous system closely resembling tetanus. (11.)

Nerves of Sensation.—With the exception of the relief of pain in dysmenorrhœa, the Acetate of Ammonia is not known to act specifically upon the nerves of sensation; but as dysmenorrhœa often depends upon the congestion of a womb which has not a sufficient outlet, and Acetate of Ammonia causes scantiness of menstruation, it may relieve the pain merely by lessening the congestion. (11.)

Ganglionic Nerves.—It is supposed that this remedy acts more decidedly upon the ganglionic nervous system, especially that portion of the great sympathetic nerve which controls the functions of the arterial system than upon any other portion of the nervous system. (11.)

VASCULAR SYSTEM.

Heart and Arteries.—Sobernheim says it causes some increased heat of skin, together with a quicker, fuller and more undulating pulse, but that these phenomena cease on the breaking out of the perspiration which it is the specific action of the remedy to cause. (11.)

Venous System.—We have no absolute proof of any action upon this system, although some authors think that it acts upon the portal system and biliary organs like vinegar and the Muriate of Ammonia. (11.)

Glandular System.—Vogt supposes that it acts specifically upon the lymphatic system like the Muriate of Ammonia. (11.)

Fever.

Clinical Remarks.—In febrile and inflammatory affections, and exanthemata, those medicines which determine freely to the skin are best calculated to afford relief. Of these, none will generally answer the purpose more uniformly than Liq.-Ammon.-A. It also forms a good auxilliary to more active measures. (44.)

In inflammatory dropsy, Dr. Todd found Liq.-Am.-Acet. a very valuable sudorific, particularly when combined with small doses of Tartar-emetic.

Skin.—The solution of Acetate of Ammonia is a valuable diaphoretic much employed in the dominant school in febrile and inflammatory diseases. (7.)

The late Dr. A. T. Thomson used it as a lotion with good effect in porrigo affecting the scalp. (7.)

Face.

Clinical Remarks.—It is sometimes used externally as a discutient, and Mr. Brande speaks of it as an excellent application in *mumps*, when applied hot on a piece of flannel. (7.)

Pharynx and Œsophagus.

Clinical Remarks.—In tonsillitis, the febrifuge mixture, (Liq.-Am., A. ꝑj., Spts.-Ether-nitr., Vin.-Ant.-tart. ā ā, ꝑij., Aq. ꝑivss. M. Dose ꝑiss. twice or thrice daily) will be found very useful, at the same time that the following formula may be advantageously used as a gargle. R. Liq.-Ammon.-acet., Spts.-Vin -rect. ā ā ꝑj., Aqua ꝑiv. M.

Genital Organs.

Clinical Remarks.—In the *hydrocele* of children it is strongly recommended by Dr. Maushner, applied by means of compresses kept constantly moist. (7.)

In *dysmenorrhœa* it has been strongly advised by Cloquet and Patin. They found it very successful in relieving the paroxysms of pain. (44.) Kopp praises this remedy very highly, as a palliative in *dysmenorrhœa*; he give a tea- or dessert-spoonful every hour from the commencement of the pain until its relief; it only palliates, but is not severe in its action and does not produce secondary affections.

Case 1.—A lady, aged 21, married for three years, without having

any children, suffered most severely every monthly period with the most violent pains in the pelvis and back; on examination the uterus was found unusually small, and with a remarkably diminutive os; Spts.-mindereri was the only remedy which afforded any relief. (4.)

Case 2.—A lady had suffered for seven or eight years at every monthly period with such violent pains lasting for five or six hours, until the free flow of the menses, that she threw herself about the bed in agony; every variety of treatment failed to relieve her until she took two doses of Spts.-Mindereri, fifty drops per dose, at an interval of a half hour; the pains were lessened by the first dose and ceased entirely after the second. At the next period, she took thirty-six drops on the first approach of pain, and the pains instead of increasing with great rapidity as usual, abated considerably; another dose was taken at the end of a half hour, followed by entire relief; the menses flowed for the first time without pain, and the lady was able to go about in two hours. (4.)

Case 3.—A maiden, aged 19, with scanty menstruation, suffered for four or five days before each period with weight in the pelvis, pains, violent headache, nausea, vomiting, restlessness and sleeplessness. These sufferings, which lasted five or six days, increased in severity from their commencement, until a scanty three days' menstruation sat in. Spts.-Mindereri, sixty drops in two doses removed almost all the symptoms, and when they re-appeared again on the third or fourth day, another dose again removed them all. After the use of this remedy for three months, menstruation occurred without pain, but was decidedly more scanty in quantity; when it was omitted menstruation again became more abundant, but was also attended with pain. (4.)

Case 4.—A young lady, aged 25, in addition to painful menstruation, had a violent dry cough and great oppression of the chest at each monthly period. Spts.-Mindereri removed all the symptoms, but also lessened the flow quite decidedly. (4.)

In dysmenorrhœa Colombat says, with the view of producing a more rapid sedative action upon the uterus and to overcome the painful tormina which accompany the discharge we may give from forty to seventy drops of Spts.-Mindereri, in a glass of plain or sweetened water, at two doses. It allays the pain and in that way facilitates the flow of the menses; the first dose should be given as soon as the malaise and uterine pains are felt, and the second in a half hour; if the symptoms do not improve, a third dose may be given, but with some reserve in order to avoid what sometimes results from it, a diminution in the quantity of the flow. (11.)

In menorrhagia and organic disease of the womb.—A married lady, aged 34, who had been much reduced by profuse menstruation, had had all the signs of consumption and organic disease of the womb, for two years. She had lancinating pains in the womb, decided increase in the size and hardness of the organ, with ulceration, and profuse discharge of sanious, very offensive pus mixed with shreds of

organic matter and black coagulæ. Walking and sitting were very painful; and all her sufferings were much increased at the monthly period; the abdomen then became exceedingly tense and painful, so that the slightest touch could not be borne; the lancinating pains became so incessant as to deprive her of all rest, and led in the course of a few days to a state of exhaustion which was only interrupted by frequent convulsive shocks and loud cries. At the end of five or six days of suffering, profuse menstruation would occur and relieve her from her intense suffering, but plunge her into a highly dangerous state of exhaustion. (4.)

After the use of all other means, forty-drop doses of Spts.-Mind. was given on the second day of a monthly period, when all her sufferings had reached their height; the pains abated rapidly and ceased entirely in twenty minutes; and the menses became less abundant.

Henceforth, thirty or forty drops would always relieve the lancinating pains and control, although not entirely abate the hæmorrhage. The next monthly periods occurred without much suffering and the flow was decidedly lessened. Examination by touch and speculum proved that the womb had lessened in size, the ulcerations had also improved and some of them seemed on the point of cicatrizing; the discharge was less abundant and offensive and she could sit and walk without pain. (4.)

Case 2.—A lady, aged 32, had suffered with frequent menstruation and so abundant that she became decidedly weaker and thinner; she also had a habitual dry cough, oppression of the chest, nausea, vomiting and poor digestion; finally the menses occurred as often as twice a month, leaving her only four or five free days, and all her other symptoms were aggravated; Spts.-Mind. was given in twenty-drop doses, night and morning, followed by gradual diminution of the hæmorrhages, so that in three months, the menses occurred only regularly once a month and lasted only four days; the other symptoms also disappeared gradually with the exception of the cough, which was also much better. (4.)

Case 3.—A lady, aged 37, subject to profuse menstruation, lasting for ten or twelve days; followed by leucorrhœa, had had six miscarriages, followed by dangerous hæmorrhages; these were succeeded by dry cough, attended with oppression of the chest, increasing in intensity with the metrorrhagia, which at one time lasted for three months, attended with heat in the genitals, extending through the whole abdomen, increase of cough, oppression, loss of appetite, nausea, vomiting, emaciation and daily loss of strength. Finally, her face became earthen, eyes dull, emaciation great, skin hot and dry; pulse frequent, small and threadlike; cough dry and frequent; oppression constant; burning heat in the abdomen, entire loss of appetite, obstinate constipation, violent pain in epigastrium and between the shoulders, burning thirst, constant nausea and frequent vomiting of mucous matters; the lower portion of abdomen was tense and very painful. The neck of the womb was hot, soft, much enlarged and

sensitive, and the slightest touch caused bleeding; with all these sufferings she had an incessant inclination for coition. Spt. Mind. was given in forty drop doses, three times a day; in three days the hæmorrhage had lessened three-fourths, with entire relief from the accompanying symptoms; the sexual inclination had also almost ceased. On examination, after six weeks' treatment, she was found almost natural in size; and in three months she recovered her former flesh, strength and health. (4.)

AMMONIUM CARBONICUM.

CARBONATE OF AMMONIA. SUBCARBONATE OF AMMONIA. VOLATILE SALTS. SALTS OF HARTSHORN. BAKER'S SALT.

AUTHORITIES.

Hahnemann. (1.) Orfila. (2.) Pereira. (3.) Noack and Trink's. (19.) Jahr. (32.) Reil. (29.) Marcy. (10.) Peters. (11.) Wood and Bache. (7.) Waring's Therapeutics. (44.) Christison. (9.)

GENERAL REMARKS.

Carbonate of Ammonia is formed during the putrefaction or destructive distillation of those organic substances which contain nitrogen. The anhydrous neutral carbonate can only be obtained by bringing together dry carbonic-acid and ammoniacal gases.

Composition. One eq. of Nitrogen and three eq. of Hydrogen.

An impure neutral carbonate may be made by submitting to distillation in water a mixture of sal-ammoniac, and carbonate of soda or potash. One equivalent or fifty-four parts of the hydrochlorate of ammonia reacts on one equivalent or seventy parts of carbonate of potash, and yields one equivalent or seventy-six parts of chloride of potassium, one equivalent or nine parts of water, and one equivalent or thirty-nine parts of Carbonate of Ammonia. Carbonate of Ammonia is a constituent of rain water. (2.)

Combined with Nitric-acid it is found in the Extract of Hyosciamus; in the distilled water of Lettuce; in the root of Helleborus-niger; and in the leaves of Aconitum-napellus. (11.)

Finally, Ammonia is developed from the decomposition of most organic substances which contain *nitrogen*. It is also found in the urine of man, in combination with Phosphoric, Hydrochloric, and Uric-acids. (11.)

Carbonate of Ammonia possesses the singular property of retaining permanently in a liquid state, the milk of the India Rubber tree. It not only prevents the milk from coagulating, but preserves it from decomposition. We have experimented with this liquid rubber se-

veral years after it has exuded from the tree, and have ascertained that it has retained all its peculiar properties perfectly.

We doubt whether there is any other substance known, which is capable of producing this effect upon the milk of rubber, for I have tested almost every conceivable article to effect the object, but without success.

It operates in a similar manner upon the blood, in preventing coagulation and retaining it in a liquid state. From its influence upon liquid rubber in preventing decomposition, we may infer that it will exercise a similar effect upon the blood. If this be true it must prove a valuable remedy in those maladies which are accompanied by a crude condition of the blood, and an unusual tendency to decomposition of this fluid. Theoretically we should commend it in typhus, malignant scarlatina, malignant erysipelas, and diseases of a similar character. (10.)

It is readily absorbed into the blood, and appears to act specifically upon the nervous system, especially upon the vertebral column. Its action is nearly the same when injected into the veins.

In the first place, its effects are chiefly manifested upon the ganglionic and true spinal systems; then we observe its effects upon the circulation, respiration, secretions, and the muscular fibres.

It is not like opium and alcoholic stimulants, a diffusible stimulant, and its effects are more transient than these substances. According to Billing it is a "local stimulant, and as such, excites momentarily the action of the heart, through the solar plexus."

"It immediately unites with animal acids, and then circulates, or is *diffused*, not as a diffusible stimulant, but as a saline sedative. It therefore performs the double operation of a temporary local stimulant to the stomach and heart, and a sedative to inflamed capillaries elsewhere."

Carbonate of Ammonia is a stimulant, excitant, diaphoretic, powerful antacid, antispasmodic, in large doses, emetic, and under some circumstances expectorant. (10.)

TOXICOLOGICAL EFFECTS.

Injected into the veins it causes convulsions. (SEYBERT.)

Internally, $2\frac{1}{2}$ drachms, to a dog, caused gastric inflammation with tetanic convulsions, the body ultimately becoming curved, with the head bent backwards. (*Opisthotonos*.) ORFILA.

WIEMER found $1\frac{1}{2}$ grs. to cause no particular effect upon himself; 3 grs., increased pulse from 68 to 72, with *throbbing headache*; 6 to 12 grs., usually, but not constantly, caused increased frequency of pulse; with disorder of brain, manifested by *pain, heaviness, throbbing, &c.*; in one case, the disposition to cough, with increased secretion of bronchial mucus, was extraordinary.

Pereira gave 15 grs., three times a day for two months, with no other effect than suspending epileptic fits during this time.

Huxham has detailed a remarkable case, illustrative of the ill effects resulting from the long-continued use of it.

A gentleman had so habituated himself to the use of vast quantities of it, that at length he could eat it in a very astonishing manner, as other people eat sugar, or carraway seeds.

The consequence was he brought on hectic fever; vast hæmorrhages from the intestines, nose and gums; every one of his teeth dropped out, and he could in consequence eat nothing solid; he wasted vastly in flesh, and his muscles became as soft and flabby as those of a new-born infant; he broke out all over his body in *pustules*; his urine was always excessively high-colored, turbid and very fetid; he finally died in the highest degree of marasmus.

Clinical Remarks.—From the above cases we draw the inference that Carb. Ammonia is homœopathic to some varieties of convulsions and tetanus; to fevers and inflammations of a septic character and attended with a predominant alkaline and ammoniacal condition of the blood, such as occurs in typhoid, typhus, scarlet and other fevers; to scurvy and hæmorrhages arising from an excessively alkaline state of the blood and diminution of the normal quantity of fibrin; to marasmus and exhaustion from the same causes. (11.)

EMPIRICAL OPINIONS.

WOOD and BACHE assume that Carb.-am. is stimulant, diaphoretic, antispasmodic, powerfully antacid, and in large doses emetic; under certain circumstances they say it may prove expectorant, as when in the last stages of phthisis, it facilitates, by increasing the muscular power, the excretion of the sputa.

As a stimulant, it has been exhibited principally in typhus fever; its principal advantage is its power to increase the action of the heart and arteries, without unduly exciting the brain; dose as a stimulant, five to ten grains, every two, three or four hours, in pill or aqueous vehicle.

According to ABLES Ammonia is stimulant, antacid and rubefacient; as an antacid it is one of the best remedies in heartburn, and for the relief of sick-headache, when dependent on acidity of the stomach.

PARIS says, it is more powerfully antacid than the fixed alkalies; it is highly useful as a stimulant in those gastric affections which supervene upon habits of irregularity and debauchery; combined with opium, it affords a powerful resource in protracted diarrhœa, from debility of alimentary canal; in muscular weakness after acute diseases, and chronic rheumatism it is the best remedy; it is also beneficial in hoarseness from relaxed states of the throat; while in typhus fever it has been particularly recommended by Huxham and Pringle and many other physicians, and some have considered it superior to any other stimulant on these occasions.

DIERBACH says, it excites the vascular system, promotes perspira-

tion, even excites profuse sweat; or on the other hand increases the secretion of urine; promotes secretion of bronchial mucus, and facilitates expectoration; while in large doses it causes tetanic, convulsive and paralytic symptoms.

It is relied upon in suppressed eruptions; a specific power has been ascribed to it in scarlet fever, in which it is used even through the inflammatory stage, although it is apt to cause fever and inflammation; it is also recommended in intermittent fever.

VOGT assumes that it causes more active metamorphoses and liquefaction in the vegetative organs; viz., increased secretion from the skin; more ready loosening of mucus from the bronchia; more profuse secretion of urine, with simultaneous absorption of lymphatic fluids from internal parts; increase and hastening of the menses; increased flow of bile; but the most marked of all, is its action on the skin; so that the ammoniac-remedies have always been considered as excellent *diaphoretica*; and next is its action upon the lymphatic, vascular and glandular systems, whence it is regarded as a fluidizing, absorption-hastening and resolvent remedy for the organs of these systems.

In larger doses it causes stimulation to the point of over-heating, whence heat and congestion have generally been regarded as signs of too great irritation from Ammonia; its expanding and dissolving powers then also become evident; excessive and very profuse perspirations set in; also greater secretion of mucus, more profuse flow of urine, and in general more hasty and active metamorphoses, with great inclination to excessive expansion and liquefaction.

This fluidizing action may become excessive, overbalance the formative power, and cause inclination, to solution and decomposition—we see this not only in the profuse secretions which it causes, but in the undermining of all the assimilative processes, viz., in the destruction of digestion, in the solution of the chyle and blood, the want of contractile power, the diminution of organic cohesion in all parts, in short, by the occurrence of a true *scorbutic state*: yet it is advised in affections of the intestinal mucous membrane, viz. in gastric fever, in mucous inflammations, and in chronic mucous states, with formation of viscid slime, in diarrhœas and dysentery.

SOBERNHEIM advises it in typhus, with predominant affection of chest and abdomen, paralytic weakness, and laxity of the skin.

P. Frank advises it especially in *febris nervosa stupida* with trembling, unequal and intermitting pulse.

Pearson, Withering, Bodenius, Malin, and Wilkinson advise it in scarlatina with nervous symptoms; the latter used it for seventeen years successively; also in measles, urticaria, and erysipelas.

Van Swieten relied on it in paroxysms of asthma.

Others assume that its action is four-fold: 1st, that of the alkalies in general, producing chemical decomposition, and softening of the animal tissues, and possessing the power of liquefying or dissolving almost all the soft solids of the body; 2d, that of an ant-acid; 3d,

that of a stimulant, or nervous irritant, the nervous affection produced by Ammonia closely resembling tetanus, and therefore probably depending upon a specific irritation of the spinal marrow; 4th, that of a saline sedative. (11.)

GENERAL EFFECTS.

On the Nervous System.—That the principal action of Ammonia is first manifested upon the ganglionic and true spinal systems, is evident from the spasmodic actions which it induces, and from the increased activity of the circulation, respiration, and the secretions. It does not affect the brain like opium and alcoholic stimulants, but appears to impress specifically the vertebral column. Among the effects of large doses, convulsions have sometimes been observed. (10.)

Nerves of Sensation.—It produces temporarily increased heat of the skin and a tendency to perspiration. Indeed it exalts momentarily the sensibility of all the organs, operating especially upon the sentient extremities of the nerves, and upon the capillaries. It causes much itching of the scalp, and of the whole surface of the body. From its stimulating effect upon the nerves and capillaries, it has been often employed in low forms of typhus, scarlatina and other maladies characterized by depressed nervous and vascular power. (10.)

Nerves of Motion.—It probably acts more specifically or powerfully upon the nerves of motion, than upon those of sensation; it not only causes increased capability for muscular exertion, and a state in which all the nervous functions are executed with greater facility, but all the salts of Ammonia cause convulsions. (11.)

Great Sympathetic Nerve.—By its specific action upon the solar plexus, it rouses into augmented activity temporarily, the heart, stomach, and lungs. Under its influence the activity of nearly every organ of the body is for a short time increased. Thus we have an increase of perspiration, of urine, of mucous secretions, and a temporary increase of muscular power. (10.)

ON THE VASCULAR SYSTEM.

On the Blood.—It is speedily absorbed into the blood, and exercises the remarkable power of inducing a more liquid state of this fluid. It counteracts all tendency to crudeness, coagulation, or decomposition of the blood, and on this account affords a reasonable ground for supposing that it may prove useful in those diseases which are accompanied, or eventuate in blood-deteriorations.

According to Billing "it immediately unites with animal acids, and then circulates, or is *diffused*, not as a diffusible stimulant, but as a saline sedative. It therefore performs the double operation of a temporary local stimulant to the stomach and heart, and a sedative to inflamed capillaries elsewhere."

In cases of poisoning by this substance, sanguineous effusions are found in various parts of the body. (10.)

Physiological Remarks.—According to Lehmann, healthy blood contains either no Ammonia or only extremely small quantities of it; but in certain diseased conditions of the system very considerable quantities of Ammonia are often found in the blood, as well as in the urine. Winter thought that the presence of Ammonia in the blood explained the phenomena of typhus fever, but Ammonia may be detected in the blood in all severe cases of acute diseases, especially in variola, scarlatina, yellow fever and Bright's disease; there is no more constancy in the presence of Ammonia in the blood during typhus than there is in the presence of the crystals of the triple phosphate in the excrements. (11.)

Formerly the convulsions and coma which so frequently occur in Bright's disease were attributed to the accumulation of urea in the blood; but Frerich has given an entirely new explanation of the phenomena in question. He is of opinion that the symptoms of blood-poisoning are not immediately due to the accumulation of urea, but are occasioned by the carbonate of Ammonia which results from the decomposition of urea within the blood-vessels. He supports his opinion by observation and experiment; he states that where patients with Bright's disease are laboring under symptoms of uræmic poisoning, such as coma and convulsions, that the blood always contains carbonate of Ammonia, which is sometimes so abundant as to be detected by the sense of smell, and to produce effervescence on the addition of Muriatic-acid. He also gives the result of some experiments which he has performed on dogs. After injecting urea into the veins of dogs whose kidneys had previously been extirpated, he found that after an interval of from one and a quarter to eight hours they became restless and vomited, then were seized with convulsions, followed by stupor. Ammonia was detected in the expired air. Simultaneously with the commencement of the convulsions, and after death, the blood and the contents of the stomach contained large quantities of Ammonia. In another series of experiments, a solution of Carbonate of Ammonia was injected into the blood of the animals; convulsions came on immediately and often were very violent, but they were soon succeeded by stupor; the expired air was at the same time charged with Carbonate of Ammonia and continued so for more than an hour, when the exhalation of Ammonia gradually ceased and consciousness returned. These experiments are certainly in favor of Frerich's notion that the Carbonate of Ammonia which results from the decomposition of urea in the blood is the poisonous agent in producing convulsions and coma in Bright's disease, and not urea itself. (11.)

Lehmann and C. Schmidt found Carbonate of Ammonia in the blood of cholera patients.

While I could detect urea in the blood, says Prof. Lehmann, of such cholera patients as succumbed before the occurrence of the group of symptoms to which we apply the term uræmia, I always found the blood ammoniacal and the gastric mucous membrane in the dead body strongly alkaline, as soon as the cerebral symptoms peculiar to

uræmia had once set in. Moreover from the analogous experiment which I have instituted with the blood in Bright's disease and scarlatina, I might have been led to the conclusion that it is not the presence of urea, but of Ammonia in the blood which occasions the symptoms of uræmia. (37.) Bernard and Barresnil have made experiments corroborative of those of Frerichs. Stannius found that after the extirpation of the kidneys, and even after the simultaneous injection of urea into the blood, urea itself could never be found in the secretions, or at all events, in the gastric or intestinal juice, or in the bile, but was detected in the sero-sanguineous exudation in the abdominal cavity; but after the death of the animals, the gastric juice, bile and all the other secretions were found to be extremely rich in ammoniacal salts. (11.)

Physical Effects of Ammonia on the Blood.—Hufeland observed that the officinal, and probably all, the salts of Ammonia have the property, to a greater or less degree, of dissolving the blood corpuscles, even to the nucleus, although slowly, and the protein textures generally. Whether they are thus endowed of themselves, or whether it is in virtue of Ammonia set free by the alkali of the blood, is a question; but at all events it has been ascertained that free Ammonia is not essential to these effects. When blood is combined with an ammoniacal salt, it acquires, generally, a brighter red; but this soon passes into a brownish red hue; it does not coagulate, but forms at best a loose, semi-fluid, cruor; the corpuscles begin to disappear and the whole becomes more limpid. Blood thus decomposed, progressively evolves distinct traces of Ammonia. It is very probable that we may partially explain, upon chemical grounds (solution and disengagement of Ammonia,) why large doses of the Ammonia act as poisons, and smaller doses, long continued, induce a scorbutic condition. Yet the same salt, judiciously exhibited, furnishes a valuable stimulant to the secretory and excretory apparatus.

Clinical Remarks.—From this powerful action upon the blood it is easy to infer that Ammonia must be useful in some blood-diseases, and injurious in others. In scorbutis the quantity of fibrine is diminished, hence the hæmorrhages; Ammon.-c. also produces hæmorrhage in a marked degree.

According to James the serum in scurvy has a marked alkaline reaction. Ammon.-c. is an alkali.

Denis found scorbutic blood to contain seven parts of neutral soluble salts, while healthy blood only contains six. Denis and Henderson are of opinion that excess of salts in the blood causes scurvy. Firmy found marked alkalinity of scorbutic blood, and ascribes its non-coagulation to the large quantity of free alkali in such blood.

Hence it would seem that Ammon.-c. is decidedly homœopathic to scorbutus.

HÆMORRHAGES.—It produces a scorbutic state with hæmorrhages, hence Noack advises it —

in malæna;
 in morbus maculosus hæmorrhagicus Werlhofii;
 in vomiting of blood;
 in hæmorrhoidal affections, such as flowing hæmorrhoids;
 in hæmoptysis;
 in hæmoptæ;
 and apoplexia pulmonum.

It causes a sensation of congestion to the end of the nose, blowing out of blood from, and bleeding from the nose after eating.

We do not see that it causes vomiting of blood, and doubt whether it has any specific tendency to do this; it may however act chemically and corrosively upon the stomach, and thus cause hæmorrhage from it, as it induces inflammation of the stomach, even when introduced into the cellular tissue.

As for hæmorrhoids, it causes great swelling and protrusion of piles with pain, discharge of blood from the rectum during and after stool.

As for hæmoptysis, it causes cough with mucous or *mucosanguineous expectoration, coughing up of blood, with burning and heaviness upon the chest, shortness of breath, redness and heat of face, nausea, anxiety, and trembling of the whole body.*

As for apoplexia pulmonum, it causes congestion to the chest—*great heaviness upon the chest with pain—heaviness upon the chest, as if from accumulation of blood.*

It is very decidedly homœopathic to purpura hæmorrhagica. (11.)

Heart and Arteries.—By its action on the nervous system it augments temporarily the muscular force of the entire organism. Through its local action upon the solar plexus, it stimulates into increased activity the heart and arteries. This augmented action is of but short duration, not excessive, and therefore not usually followed by any reaction of a depressing character. This effect of Ammonia upon the circulation is accomplished independently of any action upon the brain. (10.)

Clinical Remarks.—It has often been employed in the last stages of certain diseases, like typhus, scarlatina, yellow fever, erysipelas, &c., to rouse temporarily the depressed forces of the organism. This effect is first manifested upon the heart and arteries, and then upon the respiration, the secretions, the animal heat, and the general muscular system. (10.)

On the Pulse.—Under its influence the pulse is increased in frequency and fullness; but as the action of this stimulant is transient, the drug must be often repeated to secure a permanent influence. (10.)

Fever.—Frequent chilliness towards evening, frequent paroxysms of feverish chilliness, blueness of the hands and nails, chattering of teeth and shaking; sometimes these symptoms are followed by nightly heat, and by sweat early in the morning. Alternate chilliness and heat, with sensitiveness to cold; nausea, thirst, oppression of the chest, with stitches in the left side, tearing in the forehead, and dull-

ness of the head, alternate redness and paleness of the cheeks, pressure at the stomach, with disposition to eructations, accompanied by a violent coryza and sleeplessness; for several days, during the catamenia. Feverish heat in the head, with cold feet. Continual night-sweats. (32.)

Clinical Remarks.—In scarlet-fever, the sesqui-carbonate is the most valuable remedy we possess. It was originally prescribed by Withering, and has been extensively used by Drs. Peart, Strahl, Bodenius, Rieken, &c. Dr. Rieken considers that it acts partly by its fixed, and partly by its volatile principles. The first enters into the blood and ameliorates its crasis; whilst the second removes the depression of the nervous system. He speaks in the highest terms of its efficacy and recommends that $\text{zj.} - \text{zij.}$ be dissolved in Aq. zvj. , and that of this $\text{zj.} - \text{ziv.}$ be given every one or two hours, according to the strength of the patient, and the urgency of the case. It was found most useful in the nervous and inflammatory forms. More recently it has been strongly advised by Mr. Wilkinson, who has employed it successfully in above 200 cases. He does not depend, he states, upon its diuretic, nor diaphoretic qualities, but believes that it possesses the power of increasing the strength of the arterial action, at the same time that it diminishes its frequency; that it supports the *vis vitæ*, without increasing the heat and irritability of the system, and by such means counteracts the tendency in scarlatina-anginosa, and -maligna, to ulceration and sloughing, and all the other evils attending it. (44.)

In Austria, during an epidemic of scarlet-fever, commencing in April, 1841, Dr. J. Fischer treated 112 cases by Ammonium-carb., aided by occasional applications of cold water to the head; of which 105 recovered, and 7 cases terminated fatally. The disease generally sat in with feeling of constriction of the head, want of appetite, shivering, alternating with flying heat, frequent, tense irregular pulse, burning dry skin, dysphagia, great restlessness and uneasiness of the body, nausea, vomiting, bleeding at the nose, sometimes delirium, convulsions, (generally ceasing immediately after the appearance of the eruption,) itching and burning of the skin;—in many cases with violent rheumatic pains in feet, hands, shoulder and hip-joints. The eruption remained generally five to seven days, with exacerbation of violent fever in the evening—time of desquamation frequently from three to four weeks, followed at times by anasarca, ascites, hydrothorax, swelling of the glands.

The seven fatal cases were: two of hydrothorax, one case of angina gangrænosa, the four remaining came under treatment at a very late date, suffering from violent disturbance of the brain. (26.)

Frank, in his Magazine, speaks of one case of scarlatina, cured by Ammonium-carb., with the following symptoms, &c.: Violent fever, throat symptoms decidedly bad, the characteristic eruption had hardly made its appearance on the fifth day, when Ammonium-carb. was administered; on the same evening the eruption came

out beautifully, throat improving, fever diminishing and finally desquamation went on favorably. (26.)

Of four cases of scarlatina reported in Frank's Magazine, in two cases the eruption appeared as *scarlatina levis*, with violent throat symptoms. In the third case it appeared with cerebral disturbance, delirium, eyes fixed, and sudden screaming; the fourth case, a child, one and a half years old, with violent fever and convulsions and retarded appearance of the eruption, was successfully cured by Ammonium-carb., aided at times, by cold applications to the head. (26.)

Of four cases more, reported by Frank, two were *scarlatina-levis* and two, cases of *scarlatina miliformis*, cured by Ammon.-carb. (26.)

A case of syphilitic eruption occurring after clap, chancre and bubo, in a man 38 years of age, cured by Ammonium-carb. in 26 days, is reported by Frank. (26.)

In *acute glanders*, it proved successful, in a case which came under the care of Mr. Wilkinson. The treatment employed is thus summed up. 1. an incision into each of the Whartonian ducts; 2. sesqui-carbonate of Am, in water, hourly, as concentrated as it could be swallowed; 3. an opiate at bed-time, with wine and nourishment in such quantities as the patient could be prevailed upon to take. He places great stress upon the Ammonia having been given in a concentrated form. (44.)

Ammonia is evidently homœopathic to some varieties of fever and ague, and also to hectic fever, when the chills and sweats are predominant. (11.)

On the Mucous Membranes.—On the mucous membrane of the bronchial tubes, Ammonia appears to exercise a specific action. It stimulates the minute nervous and capillary structures of this part, and promptly augments its secretion. It has therefore been sometimes successfully employed in the last stages of phthisis as an expectorant. (10.)

Skin.—Itching over the whole, or parts of the body. *The whole upper part of the body is red, as if covered with scarlatina.* Rash on the left side of the neck and the left lower arm. (32.)

Clinical Remarks.—In lepra and psoriasis, Mr. Cazenave successfully employs this salt. In syphilitic eruptions, Dr. Schedel states that he has seen this salt succeed when mercurials have failed. The remedy, he adds, is certainly disagreeable at first, and often causes nausea, but with a little patience the stomach is soon brought to bear it. In *erysipelas*, occurring in debilitated subjects, it proves highly useful; Dr. Watson observes that after a preliminary purgation, he commences its use and generally speaking a large proportion of his cases recover. (44.)

In rubeola, urticaria, roseola, erythema, and in other diseases of the same class, Mr. Wilkinson also bears witness to the value of the sesquicarbonate. He states that for the last seventeen years he has administered this remedy, and that he has not only never lost a

patient in the above diseases, but has never had a case of the kind that has even appeared dangerous, or that has given him a moment's anxiety. (44.)

In scrofula, the late Dr. Armstrong found that those cases attended by much debility, a languid state of the circulation, and deficient cutaneous secretion, were much benefited by the use of this remedy. (44.)

Mind and Disposition.—Turns of anxiety—great anguish—vexed and vehement mood; excessive exaltation of the fancy; great tendency to start; excessive mirthfulness at one time, and at another immoderate laughter about trifles. (32.)

Clinical Remarks.—In puerperal insanity, when great debility exists, together with defective subcutaneous circulation and cold extremities, the Carbonate of Ammonium in alternation, with Camphor may be given every third hour with advantage. (44.)

In mercurial erethism no internal remedy is more to be trusted than the sesquicarbonate, in conjunction with Camphor and other stimulants. (44.)

In the nervous, excitable, anxious and tremulous conditions which often follow abuses of alcoholic stimulants and opiates, this is a remedy of considerable power. It is also useful in similar conditions arising from undue mental excitements, like grief, excessive anxiety, &c. (10.) Cases of *delirium tremens* have been said to have been cured with Carb.-Ammon. alone, but Wood says, over absolute drunkenness it has no control whatever; but in slight disorder from alcoholic drinks it occasionally gives relief. In *sick headache* with excess of acid in the stomach it is often useful. In those sudden cases of *collapse* and loss of consciousness, which, if the patient survive, must be followed by febrile reaction or inflammation, it is admirably adapted and from the absence of any special stimulating action on the brain to those cases in which the reaction is likely to be attended with inflammation or great vascular excitement of the brain. Instances of this kind not unfrequently occur in the cold stage of febrile diseases, the collapse of concussion of the brain, and the prostration of any sudden shock. (11.)

Sensorium.—Great forgetfulness. Great absence of mind. The head feels muddled, dull and stupified. Vertigo. Vertigo with nausea and loss of appetite, sometimes relieved by a walk. (32.) Temporary exaltation of all the faculties, mental and physical. An increased disposition to exercise the mind, but a lack of executive power. (10.)

Clinical Remarks.—In typhoid and scarlet fever, accompanied by a general prostration of the forces, with a dull and stupid intellectual state, alternating occasionally with transient flushes of mental exhilaration, this medicine is quite appropriate. Under such circumstances we are in the habit of prescribing the first trituration. (10.)

Sleep.—Disposition to stretch the arms and feet. Spasmodic yawning in the evening; sleepiness during the day; unconquerable sleepiness after supper; nevertheless, he cannot sleep well at night. Uneasy, unrefreshing sleep, every night; groaning and sobbing during sleep. Frequent starting from sleep as if in affright; confused, anxious, frightful dreams. At night, attack of great anxiety, as if death were approaching, accompanied by cold sweat, audible palpitation of the heart, and involuntary weeping; she was unable to move her eyes, or to speak, accompanied by labored breathing, and trembling of the hands; vertigo at night; she has to sit up in bed; rush of blood to the head, at night; boring and lancinating pain in the head, sparks before her eyes, on waking at night. (32.)

Head.—Chronic headache, headache with nausea. Sense of oppressive fullness in the forehead, as if from the vapor of coal; tumult in the head, and pain as if the contents would issue through the forehead. Drawing and tearing throughout the head. Painful throbbing and beating in the temples. (32.) Feeling of tightness, confusion and heaviness in the forehead. Pressing, hammering headache. Feeling as if the brain were loose; painful stitches in the brain. (19.) Oppression and sense of fullness of the head. (3.) Pushing sensation as if the forehead would burst, and the brain would protrude through the forehead. (12.)

Clinical Remarks—It is curative in the dull, heavy headaches, with nausea, depression and nervousness, which follow the next morning after excesses in drinking or eating—or prolonged watching and mental anxiety. It is also useful in the oppressive headaches, which often afflict paralytic subjects. In these cases again we prefer the first or second trituration. (10.)

Scalp.—Violent itching on the hairy scalp. (32.)

Eyes.—Violent stitches over the eye. Burning in the eyes, especially in the evening with photophobia. Watery eyes. Weakness of the eyes. (19.) The eyes are inflamed and dim; agglutinated in the morning. Lachrymation; the white of the eye is congested, as in incipient inflammation of the eye, the vessels of the cornea are distinctly visible. Copious lachrymation, especially of the right eye. (32.)

Clinical Remarks.—A very common symptom of yellow fever, is a congested condition of the conjunctiva, and a dimness of the eyes. When the energies of the system are failing, the blood is fast losing its normal composition, and its ability to generate sufficient coloric for the purposes of life, and the eyes become dull and congested, Ammonia in palpable doses would appear to be homœopathically indicated. We have occasionally witnessed this dullness and injection of the eyes in malignant scarlatina and in typhus, and have employed this remedy with benefit. (10.)

Ears.—Diminished hearing; buzzing before the ear; pain behind the ear. Painful tingling and crawling in the ear. (19.) Illusion of hearing; he imagines he hears the ringing of bells. (32.)

Nose.—Discharge of bloody mucus from the nose. Bleeding at the nose. Stoppage of the nose, particularly at night. Frequent sneezing; dry chronic or fluent coryza. (32.)

Clinical Remarks.—A case of epistaxis is related by Dr. Chapman, in a young woman, represented as anæmic, reduced in flesh, very pallid, and very dejected. She was twenty-two or twenty-three years of age, and had been subject for several years to repeated and copious bleedings from the nose. The only characteristic symptom that was mentioned in the letter of consultation, for the choice of a remedy for epistaxis, was, that it was brought on by washing the face and hands in the morning. Ammon.-carb. 3, was sent to her and after a few doses the bleeding ceased and recurred no more; she also recovered strength, flesh, spirits and color. The cure was permanent. (12.)

Dr. Chapman also relates a case of critical epistaxis, caused it was supposed by latent measles, to which the patient had been exposed some three months previously. The epistaxis continued to occur daily for a few days to an alarming extent. On the fourth day he complained of a severe pain in the forehead, and a sensation as if the brain was forcing itself out just above the nose. About a grain of the third trituration of Ammon.-carb. was administered. One of his serious bleedings had occurred just before. In three or four hours after he was covered with measles, and a few doses of Pulsatilla sufficed to effect a cure. (12.)

Face.—Pale face; œdematous countenance; red spots on the face; sudden heat of the face; dry, cracked lips, with violently burning blisters on them. (19.) Violent pain on the right side of the face; hard swelling of the cheek, of the parotids and the glands on the neck. White, herpetic spots on the cheek of the size of a small pea, which scale off continually. Small boils and indurations, emitting water and blood, upon the cheek, at the corners of the mouth and on the chin. Eruptions on the forehead resembling little boils. Herpetic scaly eruptions around the mouth. Chapped lips and sore corners of the mouth. (32.)

Clinical Remarks.—It has proved efficient in two cases of habitual and transient flushing of the cheeks, occurring several times during the day, with itching of the skin, and a great tendency to sweat. It is indicated in scarlatina, typhus, and yellow-fevers, when the face becomes pale and sunken, or covered with red spots, and œdematous, with injected eyes, and a general prostration of the forces of the organism. (10.)

It is almost specific against the flushings and gushes of perspiration, which are so apt to occur in women at the change of life. (11.)

Jaws and Teeth.—Tearing pain through all the teeth, and maxillary bone, extending to the ears; worse on pressing the teeth together, and on going to bed. Drawing toothache, alleviated by warmth and pressure. Disposition of the gums to bleed. Caries. (19.) Abscess of

the gums, with discharge of pus. Toothache during the catamenia. Shooting in a healthy molar tooth, in the open air. Shooting pain in the teeth uninterruptedly for eight days. Teeth feel loose. (32.)

Clinical Remarks.—It is homœopathic to scurvy of the gums; to many varieties of toothache, to inflammation of the periosteum and gum-boils. (11.)

Mouth.—Great dryness and heat in the mouth. Feeling of swelling and contraction of the mouth. Increased accumulation of saliva. (19.) Pustules upon the tongue, with a burning and stinging pain. Redness and inflammation in the mouth and throat. (32.)

Clinical Remarks.—Mr. Wallace states that he has seen some very severe cases of *cancrum-oris* cured by the internal use of this remedy in doses of grs. v., gradually increasing to grs. x—xx. every two or three hours, according to the severity of the symptoms. He advises the strong Nitric-acid as a local application at the same time. A liberal diet should be allowed. (44.)

It may sometimes be used with advantage in low forms of scarlatina, to rouse into activity the almost paralyzed mucous membrane of the throat, and thus enable the patient to throw off the distressing accumulations of mucous and purulent matters. In cases of this description we have often prescribed the 1st trituration of Ammonia with gratifying results. (10.)

Pharynx and Œsophagus.—Dryness, roughness, scraping and burning in the throat. Burning and feeling of obstruction in the Œsophagus. (19.) Sore throat towards evening. Pain in the throat during deglutition, as if the right side were swollen. Dryness of the mouth. (32.)

PATHOLOGY.—Red spots in the lower part of the mucous membrane of the Œsophagus, with some thickening of the membrane. (3.)

Clinical Remarks.—It is appropriate in cases of dryness and burning of the pharynx and Œsophagus, accompanying chronic gastritis, and certain dyspeptic conditions. It often relieves a sensation in the Œsophagus as if a foreign substance were lodged there. Also in palpable doses, in paralytic states of the muscles of the pharynx and Œsophagus, it may be employed with benefit. (10.)

Taste, Appetite, and Gastric Symptoms.—Collection of saltish water in the mouth; she expectorates freely. Taste as of blood in the mouth, during the whole time of proving. Bitter taste in the mouth, early in the morning, and attacks of nausea the whole day. Sourish and metallic taste of food; frequent eructations. Frequent heartburn. Feverish chilliness in the morning, succeeded by hiccough; nausea and coated tongue. Continual thirst. Want of appetite, early in the morning; satiated after having eaten a little; heat in the face during and after dinner. Qualmishness and inclination to vomit, every day, immediately after dinner. (32.) Want of thirst. (19.)

Clinical Remarks.—In acidity of the primæ-viæ, heartburn and flatulence, particularly when occurring in cases of atonic dyspepsia,

or in hysterical females, the Carbonate of Ammonia, proves very efficacious. It may be repeated if necessary. (44.)

It is applicable in those mild forms of dyspepsia which proceed from general debility. All the secretions connected with digestion are increased in quantity, and deteriorated in quality. Thus arise acid bitter eructations, bitter or sour taste, heartburn, nausea and distress after eating. In these cases we employ the 2d or 3d trituration. (10.)

Stomach.—Great pressure at the pit of the stomach after eating, succeeded by nausea and vomiting of the ingesta; afterwards sour taste in the mouth; feeling of fullness and pain in the stomach; also on pressure. Pressure and constriction of the chest and stomach. (19.) Oppression at the stomach after dinner and supper. (32.)

PATHOLOGY.—A small quantity of bloody serum in the stomach, of a nauseous odor, but without any smell of Ammonia. The mucous membrane appeared to have formed convolutions not unlike those of the brain. The upper part of the membrane dark red, and the convolutions below of a lighter red. The membrane thickened and soft. (3.)

Clinical Remarks.—In drunkenness, after the stomach has been emptied, the sesquicarbonate may be given internally with advantage. Its application to the nostrils is also beneficial. (44.)

In dyspeptic complaints, accompanied by preternatural acidity of stomach, and flatulence, *without inflammation*, a properly-diluted solution of Ammonia may be employed with a two-fold object; that of neutralizing the free acid, and of stimulating the stomach. It must be remembered that the healthy secretions of the stomach are of an acid nature, and that the constant use of Ammonia, or any other alkali, must ultimately be attended with injurious consequences, more especially to the digestive functions. While therefore the occasional employment of alkalis may be serviceable, their long-continued use must ultimately prove deleterious. (3.)

Through its influence upon the ganglionic system, the secretion of the stomach is increased, and its activity is temporarily augmented. The congested state of the stomach, which usually accompanies mania à potu, may sometimes be removed by this drug. (10.)

It is more homœopathic to alkaline- than acid-dyspepsia. (11.)

Abdomen.—Violent cutting, pinching and burning pain in the abdomen. Constriction and griping pain in the abdomen, with nausea and accumulation of saliva in the mouth. Constant rumbling of wind, with inclination for stool. Very great distention of the abdomen. Flatulent colic. Emissions of flatulence. (19.) Burning and boring stitches in the liver. Distention of the abdomen, with retention of stool. Rumbling and shifting flatulence in the abdomen. Contractive spasm deep in the hypogastrium, on stooping, also in the small of the back. Elastic swelling in the left groin, as large as the fist, in the

evening, after lying down, with a pain as from a bruise in that place; she cannot rest on that side, on account of this pain, which is also experienced upon the parts being touched; protrusion of hernia in the left groin. (32.)

PATHOLOGY.—Mucous membrane of the cæcum, and of the upper part of the small intestine, of a rose color. This color grows more faint as we approach the middle of the small intestine. Mucous membrane of the cæcum softened and hypertrophied. Color natural, except a small portion nearest the stomach. A small quantity of bloody serum in the intestines. (3.)

Clinical Remarks.—It is homœopathic to accumulations of flatus in the intestines, in consequence of an enfeebled condition of these parts. In old and paralytic patients, in whom all the organs are sluggish and inactive, Ammonia may be used as a palliative with considerable success. (10.)

Stool.—Constipation. Retarded and hard stool, surrounded with streaks of blood. Hard stool at first, followed by soft stool, mixed with mucus and blood, with cutting pain, before and after stool. Cutting pain in the rectum during stool. Tenesmus. (19.) Colic before and after the loose stool. After the evacuation sense as of scraping, then burning at the anus; discharge of a milky prostatic fluid; discharge of blood during, and after the evacuation. The varices of the rectum protrude, even though there is no evacuation; they recede when lying down. Sleepless at night, on account of a burning pain at the rectum; itching of the anus. (32.)

Clinical Remarks.—It is useful against obstinate constipation proceeding from a torpid and semi-paralytic condition of the bowels. By its general stimulant action upon the mucous membrane, the secretions are increased, peristaltic action is augmented, and the stools become regular. From the special influence which it exerts upon the small intestine, the cæcum, and other portions of the intestinal membrane, it would appear to be indicated in a few sub-acute inflammatory conditions of these parts, with obstinate constipation, such as are sometimes observed after prolonged attacks of enteritis. (10.)

Urinary Organs.—Frequent urging to urinate, with scanty emission; and burning in the urethra during the passage of urine, especially at night. Increase in quantity, and frequent emission of urine, especially in the evening and at night. Involuntary emissions of urine at night. Cloudy, reddish, watery urine, mixed with blood. (19.) Great urging in the bladder; pains at the neck of the bladder. Discharge of urine, leaving chalky spots; stitching and cutting in both sides of the groin to the small of the back during the tenesmus, with discharge of a few drops only. Urine mostly cloudy, wheylike, very ammoniacal and musty-smelling. (29.)

Clinical Remarks.—In the healthy urine, Ammonia is assumed to exist in larger quantities than is actually the case; in point of fact the quantity of Ammonia in healthy urine is exceedingly small, and

Scherer and Liebig even convinced themselves of the absence of Ammonia in normal urine. Heintz found that the ordinary urinary sediments consist of Urate of Soda, with a little Urate of Lime, and only traces of Urate of Ammonia. In disease it is different. In typhus-fever, scarlatina, variola and Bright's disease, the urine often contains Ammonia; the urine is, however, richest in Ammonia when it undergoes decomposition within the bladder, as in cases of inveterate vesical catarrh, or diseases of the spinal cord. Boussingault found $0.084\frac{1}{2}\%$ of Ammonia in the urine of a healthy child, aged eight months, and $0.114\frac{1}{2}\%$ in that of a youth. Bence Jones believes that he has convinced himself, by numerous experiments, that after the use of Ammoniacal Salts, (he employed the Carbonate, Tartrate and hydrochlorate of Ammonia) Nitric-acid might always be detected in the urine; and consequently that the power of oxidation possessed by the organism is so great, that the nitrogen of the Ammonia is oxidized into Nitric-acid. (37.)

It has a specific action upon the lining membrane of the kidneys, bladder and urethra.

Clinical Remarks.—A case of *diabetes* is reported in Frank's Magazine as cured by Ammonium-carb. in a lady, aged forty-eight, past menstruating; symptoms: Violent thirst, dryness of the skin, constant chilliness, emaciation, œdema of the feet, with gradually increasing ascites, passing from fifteen to twenty quarts of urine daily, of a greenish color, clear and without smell, appetite voracious. The length of time in effecting the cure not mentioned. (26.) In cases of urinary calculi, in which the urine is acid, and alkalis are indicated, especially if the constitution is much debilitated, the Carbonate of Ammonia is the most preferable alkali for administration. At the same time that it corrects the acid diathesis, it determines to the skin, and gives a stimulus to the system generally. (44.)

Dr. Barlow considers this remedy the most clearly indicated, and the most efficacious, of all others, in *diabetes mellitus*. The data on which he forms this opinion are well worthy of attention. He considers that the sugar found in diabetic urine, is not necessarily connected with, or dependent on, perverted action of the kidneys, but that it is formed in the *primæ-viæ*, in the early stage of the process of sanguinification. The saccharine particles of food are not changed in the stomach, whilst the starch, which most articles of vegetable diet contain in considerable quantity, not having its peculiar properties annulled, and its proneness to saccharine fermentation being favored by the warmth and moisture of the stomach, is converted into sugar, which being readily soluble, is absorbed into the circulation. The sugar thus absorbed takes the place of the proper and higher product, albumen, and being unable to perform the duties of the latter in the system is eliminated by the kidneys. According to this view, the first object will be of course, to avoid all saccharine and amylaceous articles of food; the second to introduce into the stomach a highly-azotized substance, and at the same time, diffusible stimulant, to ex-

alt the assimilating powers of that organ : both these indications appear likely to be obtained by Ammonia. Dr. Barlow advises the Sesqui-carbonate in doses of—gr. v.—viij., with a few drops of Tr. Opii, in some light bitter infusion every six hours. At the same time animal food, together with cruciferous vegetables, as greens, brocoli, turnip-tops, &c., should be taken freely. On this latter point Dr. Barlow places much stress. He relates cases illustrative of the decided benefit to be derived from this treatment. (44.)

Female Sexual Organs.—Catamenia too profuse and too early ; the blood very dark and passing off in clots, with spasmodic pain. Before the appearance of the menses, constant heat and feeling of uneasiness, with violent pinching and crampy pain in the abdomen, with nausea, accumulation of saliva in the mouth, chilly sensation and fainting spells. During the menses, alternate heat with chills, sensitiveness to cold, tearing pain in the forehead, and feeling of constriction of the head, sometimes redness, then paleness of the cheeks, pressure in the stomach, feeling of fullness and trembling of the stomach, violent coryza ; feeling of tightness of the chest. Watery, burning leucorrhœa. (19.) Violent acrid leucorrhœa, causing soreness. (32.)

Male Sexual Organs.—Increased weight of the scrotum. Nightly pollutions. (19.) Pain in the scrotum, and spermatic cords. Involuntary and continual erections, early in the morning, without any desire for coïtus. (32.)

Larynx and Trachea.—Hoarseness, roughness, or feeling of soreness of the throat. Accumulation of mucus in the throat. Rattling of mucus in the bronchial tubes. Cough, with feeling of tightness in the chest and pain in the head. Constant dry cough, as of dust in the throat. Violent night cough. Cough, with expectoration of mucus streaked with blood. Cough, with bloody expectoration, dyspnoea, redness and heat of the face, nausea, uneasiness and trembling of the whole body. (19.) Cough, with asthma in the evening, when in bed. Cough, with expulsion of bloody phlegm. Incipient pulmonary phthisis. (32.)

Clinical Remarks.—In chronic bronchitis, and catarrhal affections occurring in debilitated constitutions, this salt given in such doses (3ss.—5j.) as to produce an emetic effect, will often be found serviceable. In smaller doses it is also very useful in that form of catarrh which Laennec designates as “suffocative.” (44.)

In the advanced stages of croup, the sesqui-carbonate has been prescribed as a stimulant, expectorant, and occasionally as an emetic, in order to promote the discharge of effused matter. When the patient is greatly debilitated it may prove useful, but some caution is necessary in its use. (44)

It is homœopathically indicated, where the secretion of the laryngeal or tracheal mucous membrane is increased, with hoarseness, roughness, or burning in the parts, tickling, hoarse cough, day and

night, and occasional turns of asthmatic respiration. In such cases we prescribe the 1st trituration. We cannot commend this remedy too highly in coughs of this description. (10.)

Chest.—Dyspnœa especially at night. Short, quick breathing, with stitches in the chest. Long-lasting dyspnœa, with paleness of the face, in a warm room, or on ascending stairs. Congestion of blood to the chest. Feeling as if there was a heavy load on the chest, accompanied with pain: feeling of malaise and fatigue in the chest. Violent stitches in the sides of the chest and sternum, with dry cough and inability to lie on the affected side. Palpitation of the heart with constriction of the chest, after every exertion. Stitches through the heart. (19.) Asthma and palpitation of the heart after every exertion. Lancinations through the fleshy part of the chest. Frequent palpitation of the heart, with retraction of the epigastrium and sense of weakness in the præcordial region. (32.) Increased expectoration from the lungs. Accelerated respirations. Slight oppression and tightness in the upper part of the chest. (10.)

Physiological Remarks.—In the healthy pulmonary exhalation on the other hand, small quantities of Ammonia may always be recognized with great certainty. Mouchard was the first who ascertained with certainty that Ammonia was present in the pulmonary exhalation; by means of the colorless hæmatoxylin discovered by Erdmann, he could detect it in the air of each individual respiration; moreover when we employ Sulphuric-acid for the removal or determination of the water in experiments on the respiration, it is always found to contain Ammonia.

I spent this morning with my friend, Benjamin W. Richardson, whose researches, proving Ammonia to be the constituent of the blood, which kept it in the fluid state, has won for him the last Astley Cooper Prize. The Doctor showed me some very interesting and really surprising experiments, clearly proving the existence of Ammonia in the breath. Among others, the following is worthy of notice: A glass plate was covered with a few drops of twice distilled hydrochloric-acid. I then breathed upon it about sixty-five times, always taking a full breath and expelling it with force on the glass-plate, which was afterwards held over a gas-light to evaporate the fluid and induce it to crystallize. We then subjected it to the microscope, and found the most beautiful crystals of Hydrochlorate of Ammonia, which resembled—though better marked—the crystals of Hydrochlorate of Ammonia which were placed on another plate in order to compare their appearance with those formed by the breath on Muriatic-acid.

The existence of Ammonia in blood, is shown in this way: A receiver not entirely filled with blood, was covered by a plate wet with Muriatic acid. The interspace being filled with the vapor of Ammonia, forms then the crystals of Ammonia. According to Dr. Richardson, the quantity of Ammonia may be ascertained approximately, by using Chloride of Platinum, which will form with Ammonia, yellow crystals, the weight denoting the quantity thus formed.

The existence of Ammonia varies in the breath of different person

according to the state of health, the same individual even, giving off sometimes more, sometimes less. More is given off fasting, than during digestion, and the air last expelled from the lungs during each expiration, contains the greatest proportion. I take with me an extract of his researches not yet published, in order to communicate it to the Congress of Physicians at Vienna.—L. Glück.

In some diseases the quantity of Ammonia in the breath is very much increased, especially in Bright's disease when coma and convulsions have set in, in cholera, yellow- and typhus fevers. (11.)

Clinical Remarks.—In those forms of *asthma*, arising from, or connected with disease of the heart, Dr. Hope states that he has derived more benefit from this salt, than from any other remedy. In a very obstinate case which resisted all other means, a formula composed of Ammonium-sesqui-carb. and Antim.-tart. afforded great relief. (44.)

In *pneumonia*, in the advanced stages, when the inflammatory symptoms have subsided, and it becomes of importance to promote expectoration, Dr. Williams states that he has seen this indication well answered by the Sesqui-carbonate of Ammonia in doses of gr. v. or more, every two or three hours, as the urgency of the case may require. He advises its exhibition in alternation with Infus. Senegæ and with v.—x. drop doses of Tr. Lobeliæ Inflatæ. (44.)

It acts specifically upon the mucous membrane of the bronchia, and its ramifications through the lungs, augmenting the secretion, and giving rise to a congested sensation in this structure. It also stimulates temporarily the lungs, increases the number of respirations, and causes slight dyspnœa and some uneasiness of this organ.

It is an excellent remedy against very troublesome, dry or moist, short coughs, day and night, with irritation of the bronchial membrane and its ramifications, and of the substance of the lungs; with dyspnœa after the slightest exertion, stitching pains through the sides of the chest, palpitation of the heart, accelerated respirations, worse on ascending stairs; or from exertion of any kind, a general feeling of malaise.

In advanced stages of pneumonia, when the lungs are approaching a paralytic condition, with a general loss of vital energy, this is a remedy of great value. It tends to re-establish the impaired vitality, and by promoting expectoration, and imparting to the pulmonary structures increased activity, it not unfrequently induces a permanent improvement of all the symptoms. (10.)

Ammonium-carbonicum is homœopathic to one form of hydrothorax; and occasionally will cure it when the disease has advanced to that stage where the effusion becomes general, as shown by œdema of the lower extremities, enlargement of the abdomen, &c.

The following case, which occurred in a man of fifty-two years, of active habits, illustrates its prompt and remarkable power. He had been subject at times, and for many years, to hard cough, with mucous expectoration. Slow and intermittent pulsations of the heart, with occasional pains in the cardiac region. Now the cough was hard, recurring in paroxysms. Great dyspnœa, worse when in a ho-

horizontal position. Inability to sleep. Breathing better when in an upright posture. Oppression increased when moving about, or ascending an eminence. A continued feeling of fulness in the chest. Abdomen much enlarged, partly, perhaps, by crowding downwards of the diaphragm, the liver, and the spleen. Lower extremities swollen. Urine scanty. Anxious. Apprehensive of the worst consequences. This condition seemed to be dependent upon some cardiac disturbance, either functional or organic—possibly upon valvular ossification. After a great variety of remedies had been tried without benefit, and the case came to be regarded as beyond the reach of medicine, *Ammonium-carb.* effected an immediate, and rapid change for the better, so that the subject is now about his ordinary duties, and considers himself very well. Used in the 30th attenuation.—WM. E. PAYNE.

Superior Extremities.—Heaviness and want of strength, with stiffness and coldness of the arms, at night. Twitching and trembling of the fingers. Violent tearing pain in the ulna. Coldness of the hands. Tingling in the points of the fingers. Numbness of the hands. The right arm feels heavy and is without strength. Rigidity of the arms and fingers in the morning, when taking hold of anything. Tearing pain in different parts of the upper extremities. (32.)

Clinical Remarks.—We have witnessed good effects from this remedy in very troublesome cases of neuralgic pains of the extremities, coming on at short intervals, with spasmodic, jerking pains, and heaviness, and prickling sensation in the limbs. (10.)

Inferior Extremities.—Feeling of lameness, fatigue and soreness of the lower extremities. Heaviness, trembling and great weakness of the legs. Violent pain in the hip-joint, on motion. Tearing in the knee-joints, patellæ, heels, soles of the feet and toe-joints. Crackling noise in the knee-joint, on motion. Redness, swelling and painfulness of the great toe, with swelling of the foot, most painful in bed at night. Rapid swelling of the foot extending to the calf of the leg. Numbness of the lower extremities. Cold feet, even in a warm room. (19.) His legs are contracted; the tendons of the muscles of the legs feel too short; pain in the left leg, as from a sprain, when walking; uneasiness in the legs; twitches in the leg toward evening. Sudden and great weakness in the lower extremities. Great lassitude in the thighs and legs; sense as of scraping upon the femurs, at intervals. Frequent cramps in the legs. (32.)

Back.—Pain in the back, worse on motion. (19.) Pain in the back, when stooping, as if the muscles were not strong enough to support the body, which constantly threatens to fall forward; pain as from a bruise. Shooting pain in the small of the back. Drawing pain from the small of the back to the legs. Drawing all along the back, beginning at the nape of the neck; stiff neck, when turning the head. Swelling of the cervical glands, with itching eruption in the face and upon the skin. (32.)

General Symptoms.—Violent headache after walking in the open air;

it continues through the evening. Cracking in the joints, when walking. Violent rheumatic pain, with sensation as of drawing through all the limbs. Prickling sensation in different parts of the body. Hands and feet go to sleep, when sitting, passing off on exercise. Cold hands and feet, even in a warm room. Sleepiness during the day. Excessively tired and languid. Extreme lassitude. Glandular swellings. (32.)

AMMONIUM-CAUSTICUM.

AQUA-AMMONIA. SPIRITS OF HARTSHORN.

AUTHORITIES.

Noack and Trink's Mat. Med. (19.) Frank's Magazine. (4.) Jahr. (32.) Waring's Therapeutics. (44.) Orfila. (2.) Wharton and Stille's Med. Jurisprudence. (39.) Peters. (11.) Wood's Therapeutics. (7.) Christison. (9.) Marcy. (10.)

GENERAL REMARKS.

There are several varieties of Spirits of Hartshorn, viz. *Liquor-Ammoniae-fortior*, prepared by receiving gaseous Ammonia in water until it becomes nearly saturated, and contains from 29 to 32 per cent. of Ammonia. The *Liquor-Ammoniae-mitior* is prepared by adding two ounces of distilled water, to every ounce of the stronger solution of Ammonia. The true spirits of Ammonia is prepared with officinal alcohol instead of water, and has about the same proportion of Ammonia as the watery solution.

When pure, the solution of Ammonia in water is apt to contain some Carbonate, the presence of which may be known by the production of a precipitate on the addition of lime-water.

It is colorless, of a very pungent smell, and an exceedingly acrid, burning, alkaline taste; it cannot be borne in the mouth without dilution. (7.)

TOXICOLOGICAL EFFECTS.

When taken by accident undiluted, or insufficiently diluted, it produces severe inflammation of the mucous membrane of the mouth, fauces and stomach, and may even vesicate or act corrosively. (7.)

Much caution is also requisite in applying it to the nostrils, in order to revive fainting persons, or to rouse them from positive syncope. Several instances of severe inflammation of the air-passages are on record from this cause, some of which proved fatal. (7.)

Case 1.—A little boy, two years of age, took about half an ounce of very pungent spirits of hartshorn; he was very sick, bringing up at first stringy mucus of a light color, and then some more which was dark. The lips were swollen, the breathing was harsh, hurried,

somewhat obstructed, and afterwards became somewhat *croupy*. He recovered. (39.)

Case 2.—An ounce was taken in milk by a man who supposed it to be castor-oil, having poured it out in the dark. He took copious draughts of warm water, and vomited a quantity of matter like soap-suds. The inside of the mouth, upper lip, tongue and fauces were very white, and other parts excoriated. There was great difficulty in swallowing; he felt as if on fire from his mouth to his stomach; his voice was husky; pulse small and frequent, and surface cold: = a kind of collapse, such as occurs in cholera. (39.)

Case 3.—The lips were excoriated with phlyctenæ, the tongue swollen and deprived of its epithelium; the mouth and palate abraded; the throat was so painful as to prevent swallowing, and pressure on the throat and course of the œsophagus caused great pain. (39.)

Case 4.—A medical man, liable to epilepsy, was found in a fit by his servant, who tried to arouse him by holding to his nose a handkerchief dipped in Ammonia. On recovering his senses, he complained of burning pain from the mouth down to the stomach, great difficulty in swallowing, difficult breathing, hard cough, copious expectoration, profuse mucous discharge from the nostrils, and excoriation of the tongue. The bronchitis increased steadily and carried him off in three days.

Post-mortem appearances: The nostrils were blocked up with an *albuminous false membrane*; the whole mucous coat of the larynx, trachea, bronchi, and even some of the bronchial ramifications were mottled with patches of *lymph*. Hence it seems to produce a true *croupous inflammation*. The gullet and stomach showed red streaks here and there; and there was a black eschar on the tongue, and another on the lower lip. (9.)

Case 5.—A lad while convalescent from fever, was seized with epilepsy, for which Ammonia was applied to his nose with such unwearied assiduity, that suffocation almost resulted. As it was, dyspnoea with severe pain in the throat and breast immediately succeeded, and death ensued forty-eight hours after. (9.)

Case 6.—The patient had all the symptoms of a violent bronchitis, accompanied with redness and scattered ulceration of the mouth and throat, but he recovered in thirteen days. (9.)

Case 7.—A druggist who inhaled, while asleep, the fumes of Ammonium from a broken carboy, awoke in three quarters of an hour, with the mucous membrane of the mouth and nostrils corroded; a severe attack of bronchitis followed, during which he could not speak for six days. He finally recovered. (9.)

Case 8.—A solution weak enough to allow the nose to be held over it, was injected into a nœvus in a child two years old; an attack of *convulsions* immediately followed, and in a minute the child expired. (9.)

Case 9.—Orfila injected 60 grains of a pure solution into the jugular vein of a dog; immediately the whole legs were spasmodically ex-

tended, and at times *convulsions* occurred, followed by death in ten minutes.

Post-mortem appearances : Coagulated florid blood in the left ventricle ; black fluid blood in the right ventricle ; complete exhaustion of muscular irritability. (9.)

Case 10.—Half a drachm of a strong solution was introduced into the stomach of a dog, and secured by a ligature on the gullet : There was at first great agitation ; but in five minutes the animal became still and soporose ; in twenty hours it was quite comatose.

Post-mortem appearances : The only morbid phenomenon was a slight mottled appearance of the villous coat of the stomach.

Case 11.—A third dog, to which two and a half drachms of the Carbonate was given, died in twelve minutes : first it vomited ; next it became slightly convulsed, and the *convulsions* gradually increased in strength and frequency, till the whole body was agitated with dreadful spasms ; then the limbs became rigid ; the body and head were bent backwards, and in this state it expired apparently suffocated in a fit of tetanus. (9.)

Clinical Remarks.—The preparations of Ammonia would seem homœopathic to *tracroupous* inflammations of the nostrils, throat, larynx, trachea, œsophagus, and of the large and capillary air-tubes. I have already drawn attention to this fact in the Homœopathic Examiner, Vol. I., 1846, p. 187. It is also homœopathic to convulsions and tetanus. (11.)

Antidotes : The vegetable acids, such as lemon-juice, vinegar, &c., When it has been inhaled, the vapors of Muriatic-acid may be very cautiously employed. (11.)

EFFECTS ON THE NERVOUS SYSTEM.

Nerves of Motion.—In almost all cases of poisoning with Ammonia and its preparations, *convulsions* are observed, apparently shewing that these substances act specifically upon the spinal marrow. Aqua Ammonia injected into the veins, or even into the cavity of the pleura, or stomach, is apt to cause tetanic stiffness and convulsions. Pereira infers that it acts more upon the *grey*, than upon the white substance of the nerves and brain.

Clinical Remarks.—Cullen thought it the best antispasmodic known ; he gave it in doses of four to six drops, in a wineglass full of plain, or orange-flower water. Pescay recommended it in tetanus. Hope recommends it in epilepsy ; he says if taken at the first warning of an attack it seldom fails to arrest it ; Pereira quotes a case in his own practice, and another in that of Pinel, in which the inhalation of ammoniacal vapor immediately after the first warning of an attack of epilepsy, apparently averted its occurrence. He found it particularly useful in hysterical epilepsy, and in that form of the disease which Sauvages called *Lypothymia*, in which the patient is described as dying away. (44.)

Nerves of Sensation.—It is not known whether this remedy exerts

any specific action upon the nerves of sensation, apart from its irritant, and croupous inflammatory action. (11.)

Clinical Remarks.—Ducros and other French physicians have found the Liq.-Ammonia applied with a camel's-hair brush to the palate and gums so as to cause a profuse discharge of tears and saliva, rapidly cured some obstinate cases of *tic-douloureux*. It was also found productive of great benefit in the same cases; if given internally. Externally applied as a counter-irritant, it also often affords striking relief. (44.)

ON THE VASCULAR SYSTEM.

On the Blood.—The action of Ammonia on the blood has already been fully discussed when treating of Carbonate of Ammonia. (see page 257.)

Clinical Remarks.—The preparations of Ammonia are more homœopathic to *scurvy* and *hemorrhages* from deficiency of fibrin in the blood, than to any other forms of blood-diseases. In *scrofula*, the late Dr. Armstrong, found that cases attended by much debility, a languid state of the circulation and deficient cutaneous secretions, were much benefitted by Ammonia. (44.) In typhus-fever, small-pox, scarlet-fever, and other septic disorders, an unusually large quantity of Ammonia is developed, or liberated in the blood. (11.)

In the bites of venomous snakes and insects, in which the poison is absorbed into the blood, Ammonia has long been used. It is certainly a powerful nervine stimulant in these cases, and is more efficacious than brandy or any other stimulant. It may be given internally in doses of ten to twenty minims in water or wine, every half hour or oftener, if the urgency of the symptoms require it. Externally it should be rubbed into and about the bitten part. The patient should not be allowed to lie down or go to sleep; he should be kept moving about and his fears allayed in every possible way. In bites of scorpions, centipedes, mosquitos and other venomous insects, a liniment composed of equal parts of Ammon.-caust., Olive-oil and Opium, well rubbed over the bitten part, affords great relief. A few drops of the Ammon. may also be given internally. (44.)

On the Heart and Arteries.—The experiments of Blake show that Ammonia, introduced in large doses into the veins, acts by suddenly extinguishing the irritability of the heart. Small doses first lower arterial pressure, from debility of the heart action, and then increase it by obstructing the systemic capillaries. When injected into the aorta from the axillary artery, it causes great increase of arterial pressure, owing to the latter cause; and then arrests the heart, while respiration goes on. Four seconds are sufficient for the Ammonia to pass from the jugular vein into the heart, so as to be discovered there by Muriatic-acid causing white fumes. (9.)

Clinical Remarks.—Although in full quantities it extinguishes the irritability of the heart, still Wood says, in consequence of the energy,

and at the same time the brevity of its stimulant action, it is admirably adapted to all those cases of sudden depression or collapse, which if the patient survive, must be followed by febrile reaction, if not acute inflammation. The want of any special influence on the brain, adapts it peculiarly to those in which the reaction will likely be attended with inflammation, or great vascular excitement of that organ. Instances of the kind are not unfrequently presented in the cold stage of febrile diseases, the collapse of concussion of the brain, and the prostration of any sudden shock. (11.)

Pulse.—Weak, small, frequent. (19.)

Fever.—Profuse perspiration, violent fever. (19.) Dry skin, shivering, chilliness, violent thirst. (4.) Caustic Ammonia in small doses is said to act as a stimulant, excitant or calefacient; it produces a sensation of warmth in the mouth, throat and epigastrium, frequently attended with eructations. A temporary excitement of the vascular system succeeds, but this quickly subsides; the heat of the skin is increased, and there is a tendency to sweating, which if promoted by the use of warm drinks and clothing, passes over into profuse perspiration. (11.)

Clinical Remarks.—Gerard of Lyons has used it with success as a sudorific in *grave fevers*, also in those arising from atmospheric influences, i. e. in catarrhal-rheumatic fevers. Pugnet and Brachet have used it with astonishing success in catarrhal-rheumatic fevers, when the chill was well marked. (11.) Wood says, in all fevers assuming in their progress a low form, requiring stimulation, this is one of the first of the diffusible stimulants which may be had recourse to. In typhus and enteric fevers, in the various exanthemata assuming a typhoid form, especially scarlatina, small-pox and malignant erysipelas, and even in the phlegmasia, when attended with the same state of the system, it may be used, yet in all these diseases the quantity of Ammonia in the blood is increased (see page 257.). Its tendency to produce softness or moisture of the skin adds to its usefulness; and sometimes when the breath and exhalations from the patients have a *sour* smell, as they are apt to have in low fevers, its property of neutralizing acid may be considered a peculiar recommendation. We should not have been much surprised to have Wood recommending it when the breath was ammoniacal. Still he has doubtless often applied it unwittingly when that was the case, supposing the breath to be sour or musty. (11.)

In continued fevers, which have existed for some time, and where all violent action has subsided, and the brain does not appear much disordered, it is occasionally of great service. Its diaphoretic action may be improved by diluents and warm clothing. In intermittent fevers it is sometimes of advantage, given during the cold stage, to hasten its subsidence. In the exanthemata when the eruption has receded from the skin, and the extremities are cold, it is sometimes of great benefit, on account of its stimulant and diaphoretic properties.

When the recession arises from or is connected with, an inflammatory condition of the bronchial membrane it is inadmissible. (44.)

Inflammations.—Caustic Ammonia is decidedly homœopathic to inflammation, especially to the so-called “croupous inflammations” of ROKITANSKY. (11.)

PATHOLOGY.—Nasal mucous membrane covered with an albuminous coating; uvula covered with a layer of lymph and mucus; posterior surface of epiglottis, and entrance of rima glottidis covered with a false membrane; trachea and bronchi covered here and there with layers of pseudo-membrane.

Clinical Remarks.—Caustic Ammonia is evidently more homœopathic to croupous-inflammations than to any other variety. I suggested this remedy against membranous croup as early as 1846, also Bromine, the credit of which has been assumed by so many other physicians. (11.)

In some *inflammatory diseases*, especially pneumonia and rheumatism, when the violence of the vascular action has been reduced by proper treatment, Ammonia has proved serviceable. In alternation with Senega, Dr. Pereira has found it valuable in chronic pulmonary affections.

Skin.—When applied to the skin it causes pain, redness, vesication and more or less destruction of the part, thus acting first as a rubefacient, then as a vesicant, and lastly as a caustic, or corrosive agent, and may even cause gangrene. When given internally it is apt to cause perspiration.

Physiological Remarks.—In the normal sweat, especially in that from the axillæ, the occurrence of Ammonia is incontestible.

Clinical Remarks.—Although it is a sudorific it has been recommended in the dominant school against the colliquative sweats of phthisis; also against a dry parchment-like state of the skin; in exanthematic fevers with suppression of the functions of the skin, and consequent nervous affections. It is said to be homœopathic to *scarlet-fever*, because it induces a scarlet redness and burning heat of the skin, especially on the superior portion of the body, and upon the thighs and knees; it also causes a scaling off of the epidermis, dropsical effusions, inflammation of the throat and tonsils, and croupous inflammation of the throat and nose. Gerard of Lyons used it diluted with water, to prevent the inflammation in cases of burns. Tinea and herpes are sometimes combatted happily by ammoniacal lotions; and the faculty of preventing deep-seated inflammations and suppurations has also been attributed to its local application. The *Linimentum-ammonie* is much used in rheumatic pains, inflammations of the throat and catarrhal affections of the chest, especially in children. The *Liquor-ammonie fortior* is used for its vesicatory effects, when Cantharides cannot be employed on account of the extreme susceptibility to strangury, or when it is desirable to raise a blister very promptly, as in cases of sudden and great prostration from gouty spasms in the stomach, anginous affections of the heart, the sinking

spells of low fever, &c., and intolerable neuralgic or spasmodic pains. It has also been employed to obtain quickly a denuded surface for the endermic application of medicines, in cases of great emergency. It may be most conveniently applied by saturating a compress of folded linen, or piece of coarse flannel, which must be covered with a thick towel; for procuring a small blister, the top of a large wooden pill-box may be filled with lint, saturated with the liquid, and then inverted and pressed upon the skin, so as to prevent the escape of the gas. A blister is produced usually in ten minutes and sometimes so soon as five, and even three minutes; after which it should be removed to prevent cauterizing. (7.)

Its use is recommended for *Ringworm* as being one of the most useful applications: it is advisable to limit the proportion of alkali to the amount of stimulation which it is desired to produce.

Mucous Membranes.—The ammoniacal remedies have always been supposed to exert a specific action upon the mucous membranes.

PATHOLOGY. The great peculiarity of its action, is the tendency to the formation of croupous inflammations and exudations which it is apt to cause. (11.)

Head.—Dulness of the head. Pressure in the forehead, with sensation as if the head would burst, pressure in the temples. (19.)

Clinical Remarks.—Three cases of *Temulentia* are reported in Frank's Magazine as cured by Liq.-amm.-caust. in twelve to fifteen drop doses, in sweetened water every five, ten or twelve minutes. In two cases the functions of the brain were very much excited, and in one case there was complete absence of sensibility. (26.)

Syncope. A case of syncope in a woman aged seventy-five, brought on by working in the garden, during the heat of the sun, in a bent position, was cured as reported by Frank by three, four- or five-drop doses of Liq.-amm.-caust., on a piece of sugar. These attacks came on several times with trembling, coldness of the limbs, frequent yawning, and vertigo. (26.) Sage says, he obtained the most astonishing success with the vapor of Ammonia to animals asphyxiated with Carbonic-acid-gas; he thinks it acts chemically, the alkaline gas, against the acid one. Still, Ammonia causes its own peculiar form of asphyxia; in fact, in that kind of asphyxia which occurs from Ammonia, the contractility of the muscular fibre is always enfeebled. (11.) In cases of atonic apoplexy, in which diffusible stimulants are admissible, Ammon.-caust. will be found to be one of the best of these. The vapor may be also applied to the nostrils.

In *epilepsy*, and congestions of the brain, arising from debility, Dr. Hope has found the internal use of Ammon.-caust. exceedingly efficacious. He proposes a formula by which he has secured the best results, of 12 minims Liq.-amm. to an ounce and a half of water. If taken at the first warning of an attack it seldom fails to arrest its supervention. Pereira quotes a case in his own practice, and another in that of Pinel, in which the inhalation of ammoniacal vapor immediately after the first

warning of an attack, apparently averted its occurrence. (44.) Yet all the ammoniacal remedies cause convulsions. (11.)

In baldness, a stimulating wash composed of Ammon.-caust. has been found of great service.

Eyes.—*Clinical Remarks.*—In *amaurosis* depending upon the decreased sensibility of the nerve, the vapor of the strong solution directed properly against the eye, is occasionally of great service. It should be applied in a proper vessel, sufficiently near the eye to cause a smarting of that organ, together with a degree of redness, and a copious secretion of tears. It may be repeated every three or four hours. (44.)

Nose.—Entire stoppage of the nose, with discharge of watery fluid. (19.)

PATHOLOGY.—Considerable redness of the schneiderian membrane, which is covered with an albuminous layer.

Clinical Remarks.—We have long been in the habit of using this remedy against catarrhs of the nose, coryza and ozæna, both internally and locally. It is quite singular, however, that Nitric-acid will relieve some cases in which Ammonia seems indicated, but does not cure. Still both Ammonia and Nitric-acid are compounds of Nitrogen. (11.)

Face.—Pale countenance, with features expressive of pain; disfigured countenance. Convulsions of the lips. (19.) (4.)

Clinical Remarks.—The use of Ammonia against tic-douloureux has already been alluded to; (see nerves of sensation.) (11.)

Mouth and Tongue.—White-coated tongue. Burning and scraping at the root of the tongue. (19.) Tongue, gums and surrounding parts coated white, here and there covered with vesicles. (4.)

Clinical Remarks.—It seems homœopathic to some varieties of canker-sore-mouth, nursing sore-mouth, ulceration of the tongue and gums, and may prove useful in cancrum oris. (11.)

Throat, Œsophagus, &c.—Heat and burning in the mouth, extending down to the stomach, causing impediment of breathing. Enlargement of the tonsils, dark redness of the velum pendulum palati, tonsils, and the posterior wall of the pharynx, the uvula is drawn up, and covered with white mucus. Scraping and burning in the throat. (19.) (4.)

PATHOLOGY.—Considerable redness of the velum pendulum palati, its arches and of the mucous membrane of the posterior wall of the buccal cavity. A few intensely-red streaks in the mucous membrane of the œsophagus and stomach. (32.)

Clinical Remarks.—Pringle used it against angina as a resolute, but it is more especially homœopathic to the pseudo-membranous affections of the throat and œsophagus, such as the *diphtheritis* of Bretonneau. (11.)

For *chronic hoarseness, dryness of the throat* from deficiency of secretion, and *chronic asthma*, the inhalation of it has been advised to

promote the secretion of a watery vapor from the mouth, fauces, trachea, and bronchi. (44.) I have found a few drops of Ammonia largely diluted with water, and the doses repeated several times a day, the best remedy against catarrhal and paralytic aphonia. (11.)

Gastric Symptoms.—Violent pain in the stomach. Vomiting of blood. Increased thirst. (19.) Vomiting of the contents of the stomach, through the nose and mouth, with violent burning in the parts which are touched by the expelled substance; vomiting of mere mucus. Painfulness and swelling of the pit of the stomach. (32.) (4.)

Clinical Remarks.—Although it has caused vomiting of blood, yet Pinel used it diluted in four parts of water, as a hæmostatic, and Gerard has checked the hæmorrhage from cancerous ulcers. Noack advises it against violent spasms of the stomach and heartburn, also against nervous dyspepsia and gastrodynia, although it would seem far more homœopathic to gastric disorders when arising from congestion or inflammation. (11.)

Abdomen.—Painfulness and swelling of the pit of the stomach. Rumbling in the abdomen. (19.) Great sensitiveness of the epigastrium. (4.)

PATHOLOGY.—The ileum exhibits red spots here and there. (32.) During the cholera-season in Halle 1848-49. Dr. Reil used Liq.-ammon.-caust. with great success in the third stage of cholera-asphyxia, where other remedies had failed,—his mode of administering, was two drops of Liq.-amm.-caust. in gruel every ten minutes, which brought about a very favorable change, dyspnœa disappearing, the action of the kidneys and skin re-established, in fact all dangerous symptoms soon vanished; the remedy then was given at longer intervals. The above treatment in cholera is corroborated by Dr. Kurtz, who gave the Liq.-ammon.-caust. with success in cases where but little purging or vomiting occurred, or where this had almost ceased, with rapid sinking of the temperature of the skin and failing of the pulse, dyspnœa, threatening paralysis of the lungs and heart, asphyxia. (26.)

In the year 1850, Dr. Kurtz, of Dessau, used Liq.-amm.-caust. as soon as the pulse flagged, and the temperature of the skin was sinking, &c. until reaction came on; if the discharges continued, he gave Veratrum or other remedies as indicated. (26.)

Dr. Steart praises Liq.-amm.-caust. as one of the best remedies in cholera Asiatica. He has treated (as he says,) 142 cases with the loss of one; dose, thirty drops, to be repeated if necessary, in complete prostration. Dr. Ebers gave the Liq.-ammon.-caust. in six to eight drop doses, every fifteen minutes, in desperate cases. (26.)

Stool and Anus.—Discharge of blood from the rectum. (19.)

Several diarrhœic stools after the vomiting, with burning at the anus, afterwards constipation; contraction of the anus, sphincter, and colon. (32.)

Urinary and Sexual Organs.—Increased secretion of urine. Involuntary emissions of urine. (19.) The menses appear a fortnight too soon and too profusely. (32.)

Clinical Remarks.—In *amenorrhœa* and *chlorosis* Dr. Ashwell states that he has derived great benefit from a mixture of Ammon.-caust. and milk, thrown into the vagina daily. It has also been very successfully employed by Lavagna in *amenorrhœa*. (44.) Dr. Dewees relates a very obstinate case of *pruritus* in a female, which completely yielded to injections into the vagina of a mixture of $\mathfrak{z}\text{ss.}$ — $\mathfrak{z}\text{j.}$ of the solution in $\mathfrak{z}\text{ss.}$ of water. "It succeeded like a charm." He adds that he has since successfully employed it in numerous cases. It should be freely injected into the vagina. (44.) The use of Ammonia in urinary diseases has already been alluded to when treating of Ammonium-carbonicum. (11.)

Larynx, Pharynx, Trachea, Chest.—Increased secretion of mucus in the bronchial tubes. Violent cough with copious expectoration of mucus, especially after drinking. Stertorous breathing. (19.) Voice, low and feeble; broken speech. Violent oppression of the chest; want of breath, desire to draw a deep breath, which is prevented by a pain in the region of the œsophagus, hurried, heavy, rattling breathing. (32.) (4.)

PATHOLOGY.—Considerable redness of the velum pendulum palati, of its arches and of the mucous membrane of the posterior wall of the buccal cavity. The uvula is dried up and covered with a mucous layer. The posterior surface of the epiglottis, and the entrance to the rima glottidis are very red and covered with a pseudo-membrane. Considerable redness of the whole of the trachea and of the bronchi, covered here and there with membranous layer. (32.)

Clinical Remarks.—Rayer advises its application to the velum palati, in cases of simple idiopathic asthma. He dips a roll of lint, a few inches long, into a mixture of four parts of the solution, and one of water, presses out the superfluous fluid, and immediately applies it for a few seconds to the velum palati. This at first causes a feeling of suffocation, with cough and much expectoration; but this soon passes off and great relief is experienced. It should be applied weak at first and may be repeated if necessary. Great care should be taken not to apply the mixture to the back part of the pharynx, as such an application may prove serious or even fatal. Rayer states that in one hundred cases he has employed this treatment with success, and without unpleasant consequences. (44.)

In *chronic Bronchitis* an embrocation of Ammon.-caust. is advised as efficacious, and in fact in many pulmonary affections, such as *chronic pleuritis*, *phthisis*, &c., it will be found of permanent advantage.

General Symptoms.—Affections of the mucous membranes and organs of the chest. Contraction of the œsophagus and of the colon. (32.) Great prostration. (4.) Anxious countenance; pupils widely dilated.

Faintness and giddiness. He falls backwards insensible as if choked. Sense of constriction in the throat and of impending suffocation; difficult articulation and breathing; face covered with red spots, and bloody forth issues from the mouth and nostrils; tongue vividly red as if denuded of its epithelium, and in places, together with the cavity of the mouth, covered with mucus, as if with a false membrane. Great thirst, but the attempt to swallow causes violent coughing and mucous expectoration. Face burning to the touch; eyes red; pulse feeble, irregular, and frequent.

Dr. Anache has seen good results from Amp -caust. ʒj. to ʒj. of lard in hydrarthrus, applied to the knee by means of a compress, to remain about ten to fifteen minutes at a time, so as to cause redness of the parts only; then the knee to be enveloped in oiled silk, and the patient to remain in bed; this process to be repeated daily. (26.)

AMMONIUM-MURIATICUM.

AMMONIE HYDROCHLORAS. MURIATE OF AMMONIA. SAL-AMMONIAC.

AUTHORITIES.

Hahnemann. (1.) Pereira's Mat. Med. (3.) Dierbach, Mat. Med. (6.) Wood's Therapeutics and Pharmacology, (7.) Frank's Magazine. (4.) Waring's Therapeutics. (44.) Vogt's Mat. Med. (20.) Peters. (11.) Marcy. (10.) Füllgraff. (26.) Snelling. (46.) Schoenlein's Pathologie and Therapie. (24.) Chambers on Digestion and its Derangements. (47.)

GENERAL REMARKS.

This salt consists of about thirty-one parts of Ammonia, and sixty-nine parts of Muriatic-acid. Hence it is to be supposed that it partakes in part of the action of these two remedies, although it necessarily has effects peculiar to itself. (3.)

It is among the most ancient of remedies. It must have been known to the Hindoos ever since they have burnt bricks, as they now do, with the manure of animals; as some of this salt is usually found crystallized at the unburnt extremity of the kiln.

In Egypt, Sal-Ammoniac is obtained by sublimation from the soot afforded by the combustion of camel's dung; the Muriatic-acid or Chlorine of this salt being derived from the common salt on which these animals feed, while the Ammonia is derived from the decomposition of the tissues. The Kalmucks have long carried on quite a trade in natural Sal-Ammoniac, obtained from the mountains of Tartary and other volcanoes of Tartary; it is also found in the neighborhood of Baswan in Persia, and even Mount Etna furnishes a consider-

able quantity to commerce. In modern times it is prepared chiefly, on a large scale, from the impure Ammonia obtained in the manufacture of coal gas, and in the destructive distillation of bones. (3.)

It is most nearly allied in its action to Hydriodate of Potash, Muriate of Baryta, Chlorate of Potash, and Bromide of Potash. (11.)

It may be interesting to mention that the substance which the ancients termed *Sal-Ammoniac* derived its name from *Ammonia*, the name of a district of Lybia where the oracle of Jupiter Ammon was situated. Herodotus mentions the salt found in this district. (6.)

PATHOGENETIC EXPERIMENTS.

Counsellor Gumpert commenced with administering one-half or one drachm of the salt in twenty-four hours; increased the doses one drachm every three or four days, until finally from four to six drachms were given each day. When about half a pound of *Sal-Ammoniac* had been used in the course of four weeks, the following complex of symptoms would appear. (4.)

A state of things which would exactly imitate a *status pituitosus*, or *FERRIS MUCOSA*, attended with the most invincible repugnance to the remedy, so that even the thought of it would cause nausea.—The eyes would become dull, and present a peculiar glassy or watery shine;—lassitude, sluggishness and prostration overpowered the whole body;—the tongue became coated and white; the patient experienced a constant *shivering*; hawked constantly and scraped his throat because there was an incessant tickling there, although he did not get up much mucus; there was a sense of emptiness in the stomach, although the patient could not bring himself to take food. The perspiration was generally increased; the sweat broke out from the slightest exertion. Much urine was excreted, of a strong ammoniacal, or even mouldy odor, although it generally remained quite clear. Glassy and tough mucus was occasionally evacuated by stool, but diarrhœa occurred only rarely. (4.)

This state of things did not last long, before a formal attack of *fever* would prostrate the patient upon his bed; the paroxysms consisted of *CHILLS AND FEVER*, followed by profuse perspiration. *These paroxysms resembled those of an ordinary fever and ague*, and were followed by relief from the premonitory symptoms already alluded to, and from some of those of the disease against which it was given. In the course of eighteen months, Gumpert noticed five paroxysms like the above, all of which followed the *seven day-type* quite accurately; they recurred regularly as long as the organism was sufficiently saturated with *Sal-Ammoniac*; they became slighter and finally ceased as the effects of the drug wore off; and could be reproduced again at pleasure by resuming the remedy. In one case the *septimana* set in after the Muriate had been used six weeks, and recurred regularly every Thursday for four weeks; the fifth paroxysm was slight,

and the sixth omitted, while the seventh was reproduced by repeated doses of the drug. (4.)

Clinical Remarks.—It seems homœopathic to severe cases of gastric and mucous fever; also to quartan and septenary intermittent fevers. Its allied remedy, Kali hydriod., has also cured obstinate cases of fever and ague which had resisted Quinine. (11.)

WIBMER took from ten to twenty grains per dose, and repeated it at the end of an hour; the effects were a sensation of warmth and oppression in the stomach, increase of appetite and digestion, and softness of the stools, headache and increased desire to pass urine. (4.)

Clinical Remarks.—It would seem homœopathic to those gastric or humoral headaches which pass off after a free flow of urine. (11.)

When applied locally it irritates the skin moderately; but if very freely applied it may inflame it.

When taken internally in a powder it produces a feeling of coolness in the stomach; but in solution it causes the contrary sensation of warmth, which, if the dose is somewhat large, may be attended with epigastric uneasiness or oppression. The secretions become notably increased, especially those of the bronchial tubes and other mucous membranes; urination and perspiration are also frequently induced, and menstruation is said to be promoted. Small doses are apt to constipate, while large doses cause loose stools and discharge of quantities of a tough glassy mucus. (20.)

Clinical Remarks.—It is homœopathic to many of the disorders of persons of lax fibre with tendency to catarrhal or leucorrhœal affections, night-sweats and profuse day perspirations, to hæmorrhages, to chronic sore-throat, chronic bronchial coughs and expectorations, and to mucous discharges from the bowels. (11.)

With these effects, or rather preceding them, there is a liquefacient, falsely called an alterative influence, for Arnold found it to diminish the plasticity of the blood, and Fischer saw a scorbutic-like dyscrasia produced by the long-continued action of this salt. (20.)

Clinical Remarks.—The dominant school have taken advantage of these liquefacient and excretive effects of this drug to force resolutions of tumefactions and the softening of indurations. (11.)

It exercises a *specific* influence over the stomach, for Orfila, Smith, and Arnold observed that inflammation of the stomach ensued to whatever part of the body the salt might have been applied. (6.)

Clinical Remarks.—It must prove specific against gastritis. (11.)

In over-doses it causes vomiting and purging, with other symptoms of gastro-enteric inflammation.

ON THE NERVOUS SYSTEM.

In the inferior animals it has been found, when largely given, to cause great disturbance of the nervous system, as indicated by convulsions, paralysis and coma.

Nerves of Motion.—*Clinical Remarks.*—It may prove useful in some muscular pains and paralysis dependent upon *fatty* degeneration of the motor-nerves and muscles. It is more or less homœopathic to pains and other disorders, produced by the suppression of perspiration, or of some of the constituents of the urine, by which the Ammonia which should be excreted by the skin and kidneys is retained in the system. (11.)

Nerves of Sensation.—*Clinical Remarks.*—It may prove useful in some toothaches and neuralgias of the face arising from inflammation of the fibrous tissues about the parts, or in the fibrous envelopes of the nerves themselves. Also in some so-called neuralgic affections of the stomach, in which there are smaller or larger erosions or ulcerations, and consequent exposure of some of the nerves to contact with food, drink, the secretions of the stomach, both healthy and unhealthy, &c. (11.)

Ganglionic Nerves.—Vogt supposes that it exerts a peculiarly specific action upon the ganglionic system, both nervous and vascular, as is evidenced by its powerful and specific action upon the stomach and portal system, and its peculiar relation to fever and ague, and the vegetative processes generally. (20.)

ON THE VASCULAR SYSTEM.

Heart and Arteries.—According to Sundelin, after its absorption it appears to reduce moderately the action of the heart and arteries, and in this respect belongs to the class of debilitating or temperant agents; Vogt regards it as a cooling and antiphlogistic neutral salt, which follows well after Nitrate of Potash.

Clinical Remarks.—In mild inflammatory fevers, especially those complicated with affections of the mucous or fibrous membranes, as in gastric, catarrhal and rheumatic fevers, it has long been employed for promoting secretion and hastening critical discharges from the mucous membranes, skin and kidneys. (4.)

In vegetative-inflammations it is especially recommended. The Germans use it once in sub-acute inflammations, but often precede it by a few doses of Mercurius, Antim.-tart., Kali-nitricum if the feverish or inflammatory symptoms run in the least high. (11.)

Fever.—Chills and fever the whole day. Shaking chills, especially evenings and nights. *Intermittent fever returning every seventh day*, with chills and fever followed by profuse perspiration, with watery eyes, feeling of general malaise, formication, white-coated tongue, feeling of emptiness in the stomach, disgust for food, discharge of glairy, ropy mucous from the bowels, with occasionally diarrhœic stools; urine of strong ammoniacal, musty smell, but clear accumulation of tough mucous in the throat, difficult to raise; hectic fever. Profuse perspiration, having a urinous smell. Severe sweats early in the morning. (19. 26.) Chilliness, followed by heat, with a bloated red face;

thirst during both the chilly and hot stage. Frequent flushes of heat, with subsequent sweat. (31. 26.)

Clinical Remarks.—In *typhus* and *typhoid* fevers, the Muriate of Ammonia has been advised by Hoffman, Jacob, Munro, Hillary, McCausland, Gmelin, and others. Dr. Copland states that he has frequently employed it, and Dr. Conwell found it of great service in the fevers of India. Schmidt prefers it in those cases attended by diarrhœa. It is rarely used at the present day. (44. 46.)

In *intermittent fevers*, it was formerly employed and is stated to be capable of arresting the fits. Brocklesly and Pringle thought favorably of it, when the disease was of an inflammatory character. It is now rarely prescribed, although it is a most important remedy in some obstinate cases, especially when there are obstructions or infarctions in the abdominal organs, or more especially in the mucous membranes of these parts, or when the blood-poison can be removed by remedies which act upon the skin and kidneys. It is perhaps most homœopathic to quartan and septenary fevers. (11.)

In *mucous fevers*: This ought to be the great sphere of its action; it has also been used successfully against a *status pituitosus intestinalium*, especially when it occurs in persons who eat abundantly of rich and fat food, and lead sedentary lives; in persons with fat bellies, but who are still possessed of considerable vigor. It is said to be useful, although less so, in chronic catarrhs of the lungs and bladder. On account of the specific relation of Ammonium-muriaticum to mucous fever, it will be well to give a description of this peculiar disorder. Schœnlein is the only modern writer who has described it. (11.)

In its milder forms *mucous fever* may be mistaken for gastric or catarrhal fever; in its more severe ones, it is generally confounded with typhus or typhoid. It is a very deceptive and obstinate disorder, which often is only manageable in its primary stages, and may occur in most extensive and murderous epidemics. (24.)

First stage: The patient loses all appetite, has a disgust for food, or if he partakes of a little, the abdomen at once becomes distended, and there arises a sense of oppression and repletion which may be followed by vomiting of mucus and food. (24.)

The tongue has a greyish-white mucous coating; there is an unpleasant taste and feeling of much mucus in the mouth and throat; mucus is plastered over like a thick paste upon the fauces, uvula and tonsils. Or, all this exudation of mucus may suddenly become suppressed towards evening, and the mouth, tongue and throat will seem dry, red or brown, and as if varnished; quite as suddenly and generally towards morning, these parts will become moist again, and thick tough mucus may be drawn out of the mouth in long strings, or may be hawked up from the throat with much noise and difficulty; or vomiting of mucous matters may occur. (24.)

The affection may spread downwards upon the lungs, and then there will be the most sudden alternations of dryness and a parched

condition of the bronchial mucous membrane, attended with oppression and great congestion of the lungs, to be followed at irregular intervals by the most profuse effusion of mucus into the air-tubes and all the symptoms of suffocative catarrh. (24.)

If it spreads downwards upon the small bowels, there will be rumbling and colic pains, and from two to six stools per day, in which there is much tough albuminous mucus which may be drawn out into long strings, mingled with undigested food, more or less bile, and fragments of worms. There may be the same rapid suppressions and effusions of mucus from the bowels as have already been described as occurring in the lungs, mouth and throat; and attended of course with sudden variations, improvements and aggravations, of all the symptoms. (24.)

The affection often extends to the genital and urinary organs, and then in women there will be discharges of tough, albuminous and ropy mucus from the vagina, while the urine will deposit a mucous sediment. (24.)

The attendant fever generally occurs at first in the form of an intermittent, with evening aggravations and morning intermissions; as the disease progresses it assumes a remittent form, and may and will become continued and typhoid, unless arrested by proper treatment. (24.)

After a while, a partial crisis may set in, and the patient seem almost well for several days, and then without known cause a relapse will occur, so that Schönlein and Autenreith agree in saying that *febris mucosa* is a disease which will try the patience of both physician and patient, and may thus with deceitful amendments and unlooked-for relapses, sneak along for thirty, forty or fifty days. (24.)

After the disease has progressed awhile, the physician will often have to contend with congestive and sub-inflammatory affections of many organs, and with more or less ulceration of the stomach or bowels. (24.)

Ammonium-muriaticum and Kali-hydriodicum are the principal homœopathic remedies, although they may have to be assisted with Stibium, Pulsatilla and perhaps Mercurius or Arsenicum. (11.)

Venous System.—The Germans suppose that it exerts almost as specific an action upon the portal system as mercury; and Sundelin hazards the opinion that it is a temperant agent to the arterial system, and an excitant to the venous capillary system. (11.)

Clinical Remarks.—Vogt recommends it in obstructions of the portal system, in some cases of *malæna*, *icterus*, in bilious fevers or those attended with slight inflammation, or obstinate irritation of the liver or spleen. (11.)

Blood.—This drug causes a scorbutic-like state of the blood; in which there is no necessary increase of the watery particles, but diminution of the blood-globules and fibrine; in *chlorosis* there may be an increase of fibrine and diminution of blood-globules; in *scrofula*

an increase of albumen, and deficiency of fat, fibrine and blood-globules. (11.)

Clinical Remarks.—Sal-Ammoniac is indicated in some blood-diseases, or dyscrasias; also against some hæmorrhages.

Lymphatic System.—It has always been supposed to exert a specific action upon the lymphatic vessels and glands. It excites a more active state of all glandular organs; acts as a powerful resolvent remedy, and while it increases their power of absorption, it also stimulates the excretory actions of the skin and kidneys. It has been decided to act more powerfully upon the glandular tissues of the gastro-hepatic system, and of the uterine organs, than any others. (20.)

Clinical Remarks.—It has often been used successfully as an excellent resolvent remedy against obstructions and infarctions of the vegetative abdominal organs, such as enlargements or indurations of the mesenteric glands, in mesenteric marasmus, and other forms of abdominal scrofula. Also against scrofulous affections of the ovaries, and suppression of the menses in scrofulous subjects. (11.)

ON THE TISSUES.

On the Mucous Tissues.—It is supposed to exert a specific action upon the mucous membranes, especially those of the gastro-intestinal organs. It acts, although in a less degree, upon the pulmonary mucous membranes; also upon those of the urinary organs; while it effects in a still less degree the mucous membranes of the female genital organs, merely because they are more isolated from the system than any others. (11.)

Clinical Remarks.—It is thought to be most useful in mucous affections, when there is a very tough and glassy coating of mucus over the stomach and bowels, and more or less atony and torpor of these mucous membranes in connection with general obesity; it is then regarded as the best *mucum incidens* of all the neutral salts. On the pulmonary mucous membranes, on the other hand, it is supposed by those most experienced in its use, to be most beneficial, not when there is more atony and relaxation of these parts, but when the secretions are suppressed by inflammatory irritation and tension. In virtue of its mild antiphlogistic action, and of its specific tendency towards the mucous membranes it has been used with more or less success in angina-rheumatica, in catarrhus-inflammatorius, pneumonia-rheumatica, and sub-acute bronchitis, dysenteria sub-inflammatoria, urethritis, elytritis, &c. But we should have more confidence in Tartar-emetic, at least in the commencement of these affections, although Ammonium-muriaticum and Kali-hydriodicum might soon come in play. (11.)

Although it causes mucous discharges from almost all the outlets of the body, it is easy to find proofs from allopathic physicians that it will remove them. (11.)

Case 1.—A chronic gonorrhœa which had resisted all remedies for several months, was cured in three days, by twenty-grain-doses, every three hours. (4.)

Case 2.—A man had profuse mucous discharges from the bladder and violent urging to urinate, which had long resisted all remedies; he was emaciated, was scarcely free from pressure on the bladder for five minutes at a time, whence he was obliged to sit upon the close stool almost constantly night and day, and discharged with great pain and straining a Berlin quart of bloody mucus; he had constant fever. He took twenty-grain-doses of Sal.-ammon. every three hours, and was cured in three weeks.—FRANK.

On the Serous Tissues.—Next to the mucous membranes it is supposed to extend its action to the serous tissues, increasing the vegetative processes in them, especially their power and function of absorption, more particularly in the peritoneum and pleura. (20.)

Clinical Remarks.—It exerts a far less powerful action upon morbid serous effusions, such as anasarca, or general dropsy, or in pleurisy with effusion, or on peritoneal exudations, than its allied remedy, Kali-hydriodicum. (11.)

The Muriate of Ammonia has been little employed in England in *dropsical affections*, but is held in high esteem in various parts of Europe. It is stated to be particularly useful in *dropsy dependent upon hepatic disease*: and also in *ovarian dropsy*. In the latter affection, where there are so few remedies of even reputed efficacy, it should meet with a fair trial. It is favorably spoken of by Dr. Copland (44. 46.)

On the Fibrous Tissues.—It is not generally or distinctly stated that this remedy exerts any specific action upon the fibrous tissues, but it has effected cures of indurations of the prostate, and other fibrous glands; also in thickenings and semi-fibrous conditions of the stomach, bladder and urethra; also of indurations of the liver, ovaries and uterus, when a large quantity of fibrous tissue of new formation is developed in these organs. (11.) See abdomen, p. 301.

In order to give some idea of its action we append a few cases from Frank: (11.)

Case 1.—An otherwise healthy man aged forty, had suffered for a long time with frequent urging to urinate, with small discharge of urine and persistent pressure upon the bladder; also with pain in the perineum and involuntary flow of urine; on examination there was no stricture of the urethra, but great enlargement of the prostate and probable thickening of the coats of the bladder. (4.)

Treatment.—Forty grains of Sal-ammoniac were given every two or three hours; in fourteen days these doses acted powerfully upon the skin and kidneys; in four weeks the painful urging to urinate was gone, voluntary urination took place less frequently; the urine deposited much thick mucous sediment, sweats occurred every night, and several small, thinly fluid and peculiar stools, took place each day

At the end of seven weeks there was no more pressure upon the bladder, he could retain his urine longer, and passed much more at one time, the pressing and bearing down was slight, and the pain in the perinæum only occasional; while the involuntary urination had ceased entirely. A severe miliary eruption broke out over his body, the perspirations continued, and the urine deposited constantly a slimy and fibrinous, or filamentary sediment. At the end of six weeks more, although he fed himself up well, he remained emaciated, his urine still continued thick and sedimentous, his stools were thin and slimy, and his night-sweats persisted. A catheter could be passed easily and he was and remained, comparatively well, although the prostate was still somewhat enlarged. (4.)

Case 2.—A lady with great enlargement and falling of the womb, suffered with frequent irregular and profuse hæmorrhages, and with menorrhagia; she became extremely emaciated, her eyes dull, face and eyes sallow, with a permanent burning pain in the left hip, and great oppression of the chest. (4.)

Treatment.—After two months' use of Sal.-ammon. in full doses, the hypertrophy of the uterus was entirely removed, and the hæmorrhages all ceased. (4.)

Adipose Tissue.—It acts as powerfully upon this system as Liquor-potassæ, or Kali-hydriodicum. (11.)

Case 1.—Imagine a man about fifty years old, of middle stature, with a broad face, whose breadth was still more increased by a large mass of fat hanging beneath the chin; imagine also a large head, with a broad neck, adorned with a fatty mass extending from one ear to the other; two small ears pushed forwards and outwards by the fatty tumor; sallow eyes and face; lax cheeks, and thin hair, and you will have a true picture of the head of the patient. Place this head upon a delicately constructed bony frame, with small, thin hands and feet, scantily nourished arms and legs, then imagine on each arm a large mass of fat, which commenced at the deltoid muscles, passed over the shoulders to the nape, forwards upon the chest, and filling the arm-pits; a flabby pot-belly; and finally two nates, whose proportions would be envied by many modern dames, and you would have a vivid idea of the funny figure which our patient presented when unclothed. (4.)

Treatment.—He was put under the use of Mur.-ammon.; in the 6th week, the seven-day fever was established and recurred regularly every Thursday. When the patient abandoned the treatment, his belly was collapsed, there was only a trace of the fatty bolster on his neck, the nates were shrunk so that his clothes had to be made greatly smaller, and the swellings on the shoulders had much diminished. After every paroxysm of the seven-day fever, the diminution of the swellings was too evident and remarkable to admit of doubt, while the general improvement of the patient's health was equally great. Before commencing the use of Sal.-ammon., his digestion was

very irregular; loss of appetite alternated with canine hunger, and constipation with diarrhœa; but all these disturbances ceased and his sallow complexion was replaced by a more healthy and animated one; his eyes became clear; his breathing, which had been much oppressed, probably from accumulations of fat about the heart and in the chest, became quite free. (4.)

Skin.—Violent burning-itching over the whole body. Constant crawling sensation in the sub-cellular tissue. Eruption, similar to itch, on the back and lower extremities. Papulous eruption with itching, followed by desquamation. Eruption like that of measles. Blisters as large as peas, with hard and inflamed base, and violent, tense, burning pain, leaving scabs, after having been scratched open. Furuncles. (19. 26.)

Clinical Remarks.—In obstinate cases of *acne simplex*, great benefit has been derived from a lotion of Ammon.-mur., Alum, and Sulphuret of Potassa are sometimes useful. (44. 46.)

Mind and Disposition.—Timid and melancholy; internal grief, with inclination to weep. (19.) Ill-humor, indifference. (32. 26.)

Sleep.—Sleeplessness on account of chills; fever followed by sweat. Restlessness, frightful or lascivious dreams. (19.) Excessive pain in the small of the back, rousing her from sleep, with painful lameness in both hips, and in the thighs. She is roused from sleep by a tearing pain in the right upper arm and in the legs; the pain is in the bones, and begins at the heels. (32. 26.)

Head.—Vertigo, with fullness and heaviness of the head, worse during motion, better in the open air. Tearing in forehead and temporal regions. Heaviness of the head, especially in the forehead. Feeling of tightness in the occiput. Fleeting stitches in the head, especially on the side of the head and temporal region, worse on stooping; flushes of heat. (19. 26.) Violent headache for several days; headache on the top of the head. The occiput feels as if compressed by a vice; this symptom is afterwards felt in both sides of the head, accompanied by excessive ill-humor. (32. 26.)

PATHOLOGY.—The vessels on the surface of the brain are turgid. Collapse of the brain. (19.)

Eyes.—Dimness of the eyes, with a peculiar glassy, watery appearance of them. Very painful sensation like hammering over the eyes. Burning in the canthi. Dim-sightedness. (19.) Tearing in the upper border of the right eye; in the external canthus of the eye, in the eye-ball; agglutination of the eyes early on waking. (32. 26.)

Clinical Remarks.—In *albugo*, or white opacity of the cornea, Scarpa advises a collyrium of Ammon.-mur., followed by Cupri-acet. and Aq.-calcis. In some obstinate cases he found it aided the process of absorption. It is particularly adapted for *albugo*, when supervening upon an attack of small-pox. (44. 46.)

In ecchymosis of the eye (or black eye) a very good application, when black Bryonia cannot be procured, is the Muriate of Amm. in solution, mixed with bread or linseed, so as to form a soft poultice. It tends to prevent discoloration in all sprains and bruises. (44. 46.)

When there is a *premature arcus senilis*, Sal.-ammon., and Kali-hydriot. are often indicated. (11.)

Nose.—Stoppage of the nose, with constant itching sensation, as if a large and rough body were lodged in the nose, accompanied with a constant desire to blow the nose. Coryza, with sore nose; obstruction of the nose and loss of smell; dry coryza, with discharge of clear water. (32. 26.)

Clinical Remarks.—It is more homœopathic to catarrhal states of the nose, and various affections of its mucous membrane, than many other remedies much more frequently used. (11.)

Ears.—Stitches on, and in the ear. Feeling of buzzing or thundering in the ears, and pulsations, especially at night. (19. 26.)

Face.—Burning heat in the face, disappearing in the open air; ashy color of the face. Painful tearing in the bones of the face. Herpes labialis. (19.) Complexion very pale. Swelling of the cheek, with enlargement of one of the submaxillary glands, attended with a throbbing and lancinating pain. (32. 26.)

Clinical Remarks.—In face-ache, tic-doloureux, or a rheumatic affection of the face, Ammon.-mur. in large doses, repeated four times daily, has been found of great service in numerous cases, particularly when the pain partakes more of a rheumatic, than of a neuralgic character. It will not always succeed, but it often does. (44.)

Teeth.—Violent tearing in all the teeth, with swelling of the gums. (19. 26.)

Mouth.—Tongue covered by a white fur. (19.) Vesicles at the tip of the tongue, which burn like fire. (32. 26.)

Clinical Remarks.—To enlarged and flabby uvula, Dr. Addison highly commends the application of the Amm.-mur. In this manner the cough, which is caused by the uvula falling upon the back of the glottis, may be relieved. (44. 46.)

Taste, Appetite and Thirst.—Disagreeable, pappy, bitter, sour taste, with accumulation of saliva in the mouth. Violent thirst, especially in the evening. Anorexia. Loathing, disgust for food. (19.)

Gastric Symptoms.—Oppressive eructations, tasting of the ingesta; bitter eructations, sometimes tasting of the ingesta, or accompanied by hiccough; regurgitation of the food; gulping up of bitter, sour water—frequent hiccough—attacks of nausea. (32. 26.)

Œsophagus.—Sticking pain in the œsophagus. Dryness and feeling of rawness in the throat. Tickling and constant hawking on account of accumulation of tough mucus in the throat. (19. 26.)

Clinical Remarks.—Three cases of stricture of the œsophagus, reported in Frank's Magazine, as follows: *Case 1.*—A lady, sixty-four years of age, complaining of violent dysphagia, regurgitation of food, accompanied by a feeling as if the food were forced through a narrow place about an inch over the cardiac extremity of the stomach, Ammon.-muriat. ℥j. every two hours, continued for weeks, with only a few interruptions, effected a cure. (4. 26.)

Case 2.—A man, aged thirty-seven, with the following symptoms: Dysphagia, regurgitation of food, which had to be forced down the second time, causing violent pain and burning in the region of the cardiac extremity of the stomach. Diagnosis given as: *Stricture inflammatoria œsophagi, Ammonium-muriaticum* in doses of about ℥j. every two or three hours, effected a cure in ten days. (4. 26.)

Case 3.—A lady, aged forty-six, of delicate constitution, with the following symptoms: Derangement of digestive organs, pressure in the stomach, constipation, pain in the lumbar-sacral region, emaciation and languor; super-added to it, a sudden painful feeling in the cardia and complete inability to swallow solid food. Ammon.-muriat., in the above very large doses administered for a week, brought about such a change as to enable her to eat any kind of food. (4. 26.)

There are also two cases of scirrhus pylori, (diagnosed as such) in Frank's Magazine, reported to be cured by the long-continued use of Ammon.-muriat. for six weeks and longer, in doses of ℥ss. to ℥j. (4.)

Stomach.—Empty or bitter eructations. Hiccough accompanied by stitches in the chest. Nausea, after eating. Disgust and vomiting. Vomiting of frothy mucus. Frequent vomiting of a greenish fluid. Feeling of emptiness, and prostration as if caused by fasting too long, with aversion for food. Feeling of discomfort and heat in the stomach. Feeling of fullness and pressure in the stomach, accompanied by nausea, heat and heaviness in the stomach. (19.) Frequent drawing in the stomach, with disposition to waterbrash, and great qualmsiness and even vomiting; gnawing or grinding in the stomach, as if from worms. (32 26.)

PATHOLOGY.—The vessels of the stomach are injected, exhibiting an arborescent appearance, and are dark-red. Mucous membrane inflamed, and sometimes detached from the muscular coat. The mucous membrane of the stomach, in the direction of the spleen, is covered with a large number of small, gangrenous ulcers, penetrating the mucous membrane throughout. The mucous membrane of the stomach has become putridified, in the region of the spleen, and separated in pieces floating in a quantity of slimy fluid. Blackish, fetid fluid in the stomach and ilium. (19. 26.)

Trousseau strongly advocates this remedy in schirrus of the stomach. He states that he derived decided benefit from it, administered every two hours. It is reported to relieve the vomiting and heart-

burn, so constantly attendant on this disease, more speedily and uniformly than any other remedy. (41. 46.)

It is probable that this remedy will prove almost as homœopathic as Kali-hydriodicum to *mucous flux*, or *chronic catarrh of the stomach*. (11.)

In this disease, according to Chambers, there is usually found after death, more or less congestion of the capillaries of the stomach, and even of the larger blood-vessels; and there is sometimes yellow, or dark-brown matter, looking like exuded blood mixed with the mucus. (47.)

The constant sipping of weak potations, especially tea, seems in some cases to be the cause of gastric flux; at all events patients have been better for leaving off the habit. Indolent, sedentary persons seem more subject to it than others; females more than males: and the middle period of life, from forty to fifty, more than any other age. (47.)

One peculiarity, Chambers has rarely failed to notice in patients thus affected, viz., that they have been of a desponding, easily depressed turn of mind; not absolutely melancholic, but disposed to dwell always on the gloomy side of everything, external or internal. (47.)

The symptoms of gastric mucous flux seem to be closely proportioned to the quantity of mucus secreted, and consequently to the extent of membrane involved. Where these are moderate, the difficulties of digestion are so slight as often to escape notice. There may be only a certain want of appetite and nutrition, and an incapacity for benefitting by the food taken, in no way distinguishable from similar symptoms arising in general anæmia and atony. But where the whole or greater part of the stomach is covered with mucus and enough is collected to interfere with the action of the gastric juice upon the food, phenomena of a well-marked character manifest themselves. Then there is a sensation of uneasiness, scarcely in the majority of cases amounting to actual pain in the epigastrium, coming on mostly at times when the stomach is empty. It is at first accompanied by a craving for food; but no sooner is any taken than it excites a feeling of weight and distension within a very short time, often only relieved by actual vomiting. Where, however, the pain arising from the food is rendered very great by excessive sensitiveness, then there is often a disgust for eating, and an idea that the craving is a false sensation, so that patients will say that they have no appetite, but that there is an emptiness and "sinking" in the stomach. Strictly speaking, they have a desire for food, but this is accompanied in sensitive persons with so much nausea and disgust, that they refuse to recognize it as related to healthy appetite. (47.)

In the empty stomach there often collects a considerable amount of mucus, which excites vomiting, without any other stimulus; so that at times quite remote from meals, such as in the morning, a

large quantity of glairy mucus is thrown up with great relief to this nausea and other uneasy sensations.

There is sometimes considerable distension of the stomach by flatus, and a sensation of spasmodic constriction when the stomach is empty, especially on lying down in bed at night, or in the morning before breakfast. Indeed the recumbent posture seems to be particularly unfavorable in cases of gastric flux, and the nocturnal symptoms are often capable of relief by the simple expedient of sitting up. (47.)

There is often constipation, and the motions are accompanied from time to time by a good deal of mucus. The urine is clear, and sometimes contains more mucus than usual. There is often a good deal of thirst, but no other marks of fever. (47.)

In cases of long duration, there is a dull leucophlegmatic aspect, a feeling of weakness, cold extremities, and small feeble pulse. The matters vomited sometimes consist solely of food in a state of acid fermentation; but it is not rare on some days to find a quantity of mucus, acid or alkaline, in long stringy masses. When the vomiting occurs at times remote from meals, there is sometimes no food at all in it, but merely a quantity of glairy fluid, as if the stomach had filled with mucus which it then rejects. (47.)

Gastric flux is sometimes accompanied by a similar condition of the bowels, and mucous diarrhœa, with all the varieties of intestinal worms may appear.

The appearance of the tongue varies, and alone is not a safe index of the disease. It may be pale and flabby and covered with mucus; or if there be much disorder in the salivary glands, or sub-acute inflammation of the stomach, it may be red, raw, and glazed. (47.)

It is very common for food enveloped in mucus and unable to be penetrated by the gastric juice, to take on acetous fermentation, and to produce acid eructations, heartburn and pyrosis of the œsophagus, and a painful collection of wind in the stomach, so that the distress resulting is of a spasmodic or distensive character, and appearing to be relieved by the passage of the wind, is attributed solely to that cause. (11.)

Abdomen.—Great distention of the abdomen as far as the stomach, disappearing after stool. Cutting and sticking pain in the whole abdomen, disturbing sleep at night. Sticking and burning in the right hypochondrium. Violent cutting pain in the abdomen, disappearing after stool. Flatulent distention. Cutting, sticking pain in the abdomen. Profuse discharge of fœtid flatus, with rumbling in the bowels. Flatulent colic. (19.) Splenetic stitches. Feeling of distention in the groin. (32. 26.)

PATHOLOGY.—The volume of the liver is diminished, its surface and edges exhibit a bright red color. Blackish, fœtid fluid in the stomach and ilium. Enlargement of the muciparous glands in various parts

of the jejunum and ilium, with attenuation of the coats of these intestines; the prominences contain incipient miliary ulcers. (19. 26.)

Clinical Remarks.—It is homœopathic to excessive flatulence; to a mucous condition of the stomach and bowels, and to enlargement and ulceration of the solitary glands. (11.)

Liver.—*Clinical Remarks.*—It is probable that Ammon.-mur. may prove a remedy against that excessive development of imperfect or degenerate fibroid tissue which causes cirrhosis of the liver, kidneys, and other glandular organs. The liver becomes harder and heavier than natural; the interstices between the lobules become thicker and more solid. The kidneys become hard and white in a similar way, in one form of Bright's disease. Probably all other organs are liable to the same evil; fibroid degenerate tissue is sometimes found in greater quantity than the healthy tissue, which it displaces, and hence it is possible to have an increase of size and weight in the organ affected, although its ultimate tendency is to contract into itself, and to form hard and dwindled masses. So the liver is usually shrunk up and dwindled by this deposit of fibrous tissue in its interstices, the edges are rounded, and the outside covered with wrinkles and irregular depressions; so too are the kidneys, they finally become hard, small, and covered with scars, while the capsule is bound by the contracting cellular tissue so close to the viscus, that you can scarcely detach it without tearing. (11.)

Stool and Anus.—Pain in the umbilical region. Constipation with constant cutting pain in the abdomen, and a feeling as if diarrhœa would set in. Soft stool, with pain in the abdomen. Frequent liquid stools. *Discharge of glairy tough mucus with the stool.* (19.) Occasional intermission of stool for several days. Hard stool during the whole time of the proving; stool passes in scybalæ, which can only be expelled by bearing down, always followed by a soft stool. Soreness of the rectum, several pustules being discovered by the side of it; bleeding from the rectum. (32. 26.)

PATHOLOGY.—Small red spots on the rectum.

Clinical Remarks.—It is most homœopathic to a mucous state of the bowels; to mucous flux, or diarrhœa; to dysentery alba; to colics arising from inspissated mucus in the bowels; to mucous gastrointestinal fever; to ulceration and hæmorrhage from the rectum. (11.)

According to Chambers, the chief local symptom of *mucous flux in the small intestines* is not so much pain, as a sense of discomfort, felt two or three hours after a meal. The excretion of *fæces* is very irregular, and is accompanied by the discharge of a quantity of glairy mucus. Sometimes this mucus is so copious as to constitute a sort of diarrhœa, but generally the stools are hard and costive, though enveloped in a slimy medium. The excreted matters vary greatly in appearance; sometimes they are light colored and abundant, of a faint putrid smell, and containing principally unaltered food; sometimes they are dark, like pitch, scanty and slimy. There is often separated from them, when fluid, a good deal of oily matter, probably

derived from the undigested adipose tissue of the food. The mucus too, may look like lumps of fat, being in white opaque masses; at other times it has more the appearance of macaroni, being drawn out into adhesive strings.

The appetite is always bad in intestinal mucous flux; there is also great languor and incapacity for exertion, coming on generally about an hour after food, accompanied in *bilious* cases, by an almost irresistible drowsiness, which lasts for several hours. Yielding to the drowsiness and taking a nap seems to make matters worse, for there is usually felt after such an indulgence, an intense headache or giddiness, which continues longer than the symptoms would have done, had the inclination to sleep been resisted. The depression of spirits is not so remarkable as the feeling of utter helplessness, both of body and mind, accompanied in persons naturally active, with a sense of shame at their unwonted apathy. Sometimes there is a semi-jaundiced state of the skin, and sometimes attacks of complete jaundice supervene from the spread of the disease upon the mucous membrane of the gall bladder, &c.

The tongue may be pale, flabby, wet and slimy; or it may have a red base, and be irritated in patches.

When the bowels are costive, the urine is apt to be thick and high-colored; but generally it is natural, or pale and watery.

The pain in the abdomen is generally in the right hypochondrium, or in the cæcum, or about the navel. Sometimes acute attacks of spasmodic pain about the waist come on, and the skin around the navel may become so sensitive that peritonitis may be erroneously suspected.

There is almost always distressing flatulence, which produces a feeling of suffocation, from pressure of the diaphragm upwards; the same impediment to the motion of the heart, causes palpitation, irregularity and indefinable anxiety during the day, and frightful dreams at night.

Intestinal mucous flux has very generally a *periodic* character. The patient is pretty well for a week, or a fortnight, or a month, and then the symptoms above described, or an aggravation of them, occur. A copious discharge of mucus in the stools follows, and then a temporary restoration to health. The flux of mucus seems to be of a critical character. This period in females often coincides with the menses, and leads them to suppose that their intestinal trouble arises from some latent disease of the womb. (47.)

This *periodicity* is most readily observed, when the mucus collecting in the bowels is inhabited by worms. The irritation excited by these creatures around the anus is often entirely unperceived except in the catamenial week, and then is excessively annoying. (47.)

Tenesmus also, not unfrequently accompanies the copious secretion of mucus, and sometimes the continuation of these symptoms is followed by hæmorrhoids in the rectum. Children are also very subject to mucous flux and all its consequences. (11.)

Urinary Organs.—Great pressure on the bladder from above downward, accompanied with rigors, causing fæces to be forced out; great anguish at the neck of the bladder; discharge of urine, leaving white chalky spots on a wooden floor. (19.) Bright-reddish urine, without flocculi or sediment, during the catamenia; bright-yellow urine, with a loose cloudy sediment; clayish sediment in the urine, after standing an hour. (32. 26.)

Clinical Remarks.—*Ammon. mur.* in large doses (ʒj. every three hours) effected a cure in three weeks, as reported by Frank, in a man with violent pressure on the bladder and discharge of purulent mucus during micturition. The urging to urinate was so great as to oblige him to remain in the water-closet almost constantly, where amidst the most violent pain, he passed in twenty-four hours nearly a quart of muco-pus, mixed with blood. The patient was very much emaciated, and had almost constant fever. (4. 26.)

Several cases of dysuria and ischuria vera, have been cured, according to Frank, by large doses of *Ammonium-muriaticum*. In some instances the disease appears to have originated from enlargement of the prostate gland. (4. 26.)

The very favorable curative results which physicians of every school have witnessed from the employment of *Ammonium-muriat.* in various diseases of the kidneys, formation of calculi, blenorrhœas of the urinary apparatus, and even strictures, are undoubtedly to be referred to its specific action upon the mucous membranes of the uro-poetic system. (44. 46.)

Sexual Organs.—Menses too early and lasting too long, accompanied with pain in the abdomen, dorsal and sacral regions. (19.) Leucorrhœa with distention of the abdomen, without accumulation of wind. (32.) Metrorrhagia in a married woman, who had not menstruated for two months. (4. 26.)

Clinical Remarks.—Frank reports a case of chronic gonorrhœa which had resisted various remedies, which was cured in three days by large doses (ʒj. every three hours) of *Ammonium-muriat.* (4. 26.) In the same Magazine there are also several cases of hypertrophy of the prostate gland, reported as cured or very much relieved by the long-continued use of large doses of *Ammon. mur.* (26.) A case of hypertrophy of the uterus with profuse irregular menstruation in a married but childless lady, aged forty, was cured according to Frank in two months by the use of *Ammon. muriat.* in large doses. (4. 26.)

This salt is strongly recommended by Sundelin in *amenorrhœa*, as an emenagogue in those cases in which the disease depends on, or is connected with inactivity of the uterus. (3. 46.)

In *Hydrocele* a radical cure may sometimes be effected by the topical application of a strong discutient lotion. This plan of treatment is chiefly, if not solely adapted to recent cases, which have arisen from external injuries and those occurring in children. It was first performed by the late Mr. Kento in 1788; and was successfully employed in some cases by Sir A. Cooper. The lotion employed

by both these surgeons was simply a solution of *Amm.-mur.* After a few applications it produces excoriation of the scrotum, and aids the process of absorption. (3. 46.)

In *uterine hæmorrhages* Dr. Copland considers that it will prove serviceable, in cases of debility and when the discharge is draining or remittent. It is most useful when there is hypertrophy of the uterus; when there is simple congestion, *Ammon.-acet.* is most useful. (11.)

In *prurigo pudendi* it will be found serviceable in allaying the intense itching. (3. 46.)

It has been used as an injection in gonorrhœa. (44. 46.)

Larynx, Pharynx, Trachea.—Dry cough, with stitches in the chest, especially under the false ribs of the left side, worse on lying on the side. Loose cough, with rattling of mucus in the chest (19.) Sore throat, stinging in the throat, during and between the acts of swallowing; when yawning; external and internal swelling of the throat. Throbbing in the tonsils, and glands of the neck, accompanied by flushes of heat. Phlegm in the throat, expelled with difficulty. Dry cough arising from tickling in the throat. (32. 26.)

Clinical Remarks.—A case of scrofulosis, in a boy aged thirteen years, as reported in Frank's Magazine, was cured by the use of *Ammon.-muriat.* (dose and duration of treatment not given). The condition of the patient when he came under treatment was as follows: Submaxillary glands hard and swollen, nose and upper lips also enlarged, fetid discharge from the nose, sometimes forming crusts in the nostril during the night, and when loosened in the morning, would leave the parts sore; appearance of the face pale and bloated. (4. 26.)

Most remarkable results followed the employment of this remedy in the case of a dry, rapid, and suffocating cough, with inability to utter a word during the paroxysm. The paroxysms always came on at about six o'clock, P.M. and lasted from one-half, to one hour. There was suppression of the menses, but whether this occurred subsequent or prior to the appearance of the cough, am unable to say. After many remedies had been tried without benefit, the cough immediately ceased upon the employment of *Ammon.-mur.* 30th, and menstruation returned, and was normal. W. E. PAYNE, Bath, Maine.

Case of aphonia: A case is related by Dr. Gerner, in which a young lady, in consequence of exposure to cold, entirely lost her voice. Numerous remedies were tried in vain for three months. She at last completely recovered her voice in three days, from the inhalation of ammoniacal vapor, disengaged from a mixture of the solution of the Muriate of *Amm.* and Carbonate of Potash. A few drops of spirits of Hartshorn internally, or the inhalation of a weak preparation of Hartshorn would have effected the same good result. (44. 46.)

In *hooping cough* the *Ammon.-mur.* was recommended by Stoll at an early stage. Dr. Copland states that he has found it serviceable. All the alkalies are more or less useful in *tussis convulsiva*. (3. 46.)

In enlarged and flabby uvula Dr. Addison highly commends the application of the Am.-mur. In this manner the cough, which is caused by the uvula falling upon the back of the pharynx, is removed. (44. 46.)

Chest.—Short, quick respiration, hot breath. Heaviness of the chest, especially at night, with restlessness, preventing sleep, feeling of constriction of the chest. Stitches in the chest, more on the left side, worse during inspiration and coughing. Pressing and stitches in middle of the sternum, as if something had lodged there. Increased action of the heart (19.) Shootings in the chest, coming on at regular intervals, as the beats in music. Asthma. (32. 26.)

PATHOLOGY.—A few red spots on the anterior surface of the lungs. Collapse of the lungs. The fat which separates the base of the right ventricle from the auricle externally, contains a good deal of extravasated blood, the extravasation extending into the muscular tissue. Dark-red blood, which soon turns bright-red in the air.—The blood is less coagulable; the fibrin is increased. Aneurismatic distention of the heart and large vessels. (19.)

Clinical Remarks.—*In phthisis tuberculosa incipiens* it has been employed with success, as we find seven cases reported cured or nearly so, in Frank's Magazine. (26.)

CASE 1. A tailor, aged thirty, cachectic for a year past, affected with dyspnœa and cough; at times his expectoration was mixed with blood. Cured in twenty days by large doses of Ammonium-muriaticum. (4.)

CASE 2. Condition as in Case 1, apparently cured in fifteen days, by Ammon.-mur. ℞j. every two hours. (4.)

CASE 3. A bookbinder, aged nineteen, of tolerably good constitution, had been sick for three weeks with cough, fever, and with muco-sanguineous expectoration; after the use of Ammon-muriat. ℞vi. in doses of ℞j. every two hours, a cure was effected in nine days. (4.)

CASE 4. A man, aged twenty-four, formerly affected with the itch, came to the hospital in the following condition: Cough, dyspnœa and feeling of constriction in the chest; under the use of Amm.-mur. ℞viii. in sixteen days, a cure was effected. (4.)

CASE 5, 6 and 7, were persons, more or less of phthisical constitution, with cough, copious purulent expectoration, dyspnœa, stitches in the sides and base of the lungs, quick pulse, with or without fever, and night-sweats; at times the expectoration was mixed with blood. (4.)

By the use of Amm.-mur., in doses of ℞j. every two or three hours, (with a few intermissions) for weeks and even two months, in one case, the patients were discharged as cured or at least very much benefitted. (4. 26.)

In chronic pleurisy, chronic inflammations of the lungs, and congestions of the mucous membranes, Sir G. Lefevre speaks highly of the value of Ammon.-mur. It is a popular remedy with the German physicians. Kali-hydrodicum is generally more useful. Dr. Cop-

land advises its use in *hæmoptysis*. It appears to be chiefly applicable to passive cases in which the vital powers are much depressed. (44. 46.)

In rheumatism of the muscles of the chest, and pulmonary diseases, Dr. Paris recommends a plaster principally composed of Mur. of Ammon. and states that is also efficacious in chronic swellings and indurations. (44. 46.)

Mammæ.—*Clinical Remarks.*—In abscess of the mammæ, or milk-abscess, a lotion originally prescribed by Justamond has been found of great service. It is composed of Ammon.-mur. ʒj. Spt. Rosmarini Oj. Linen rags wetted with the solution are to be kept continually to the part. It is chiefly applicable in cases of induration of the mammæ, after the abscess has suppurated. (44. 46.)

Back.—Tearing pain down the sides of the neck. Violent pain and feeling of soreness in the sacral region, interrupting sleep, with laming pains in the hips and exterior of the thigh. Pain in the sacral region, obliging him to stoop. (19.) Pain in the small of the back, as if the parts were bruised or dashed to pieces, both when at rest, and in motion, and at night when in bed, she was not able either to lie upon her side or upon her back. Icy coldness of the back and between the shoulders, not removed either by feathers or wool; the coldness terminates in itching. (32. 26.)

Clinical Remarks.—It promises to be useful in many cases of chronic pain in the back; in lumbago, and in back-ache from derangement of the kidneys; also in the back-aches of sedentary, torpid and inactive persons, with great or some inclination to obesity, and fatty degeneration of the muscles of the hips and loins. (11.)

Upper Extremities.—Heaviness, numbness, rigid feeling of the arms. Drawing and tearing in the arms, hand and fingers. Tearing, as if in the marrow of the bones of the arms. Sticking, twitching and crawling in the points of the fingers. (19.) Burning and pressure in the right axilla. Small vesicles on the wrist-joint, first itching vehemently and then burning, when scratched; large blisters and indurations deep in the skin upon a hard base, itching and burning, become inflamed and form a red-brown scurf, which remains inflamed for a long time, around the right wrist-joint (with swelling of the spot); frequent tingling in the tips of the fingers. (32. 26.)

Clinical Remarks.—It is homœopathic to some rheumatic and neuralgic affections of the arms, especially when the fibrous tissues of the tendons and periosteum are mostly involved. It is also indicated in salt-rheum of the wrists and hands; in furuncles and impetigo. (11.)

Lower Extremities.—Violent, boring pain in the lower extremities. Trembling, weakness in the legs. Stitches and tearing in the hips and thighs. Pain, as if the tendons of the leg were shortened, causing him to limp. Violent stitches in popliteal space. Pain with throbbing tearing in external maleolus, and heel; twitching, tearing,

crawling and stitches in the toes. (19.) Tension and traction in the tendons of the legs. Spasmodic contraction around the lower part of the left leg. Cold feet, in the evening, when in bed, it takes a long time to get them warm. (32. 26.)

Clinical Remarks.—It is suitable to a peculiar form of pain in the lower extremities, depending upon the conversion of a portion of the muscular tissue into fat. If the patient is inclined to be fat and has a premature *arcus senilis* the diagnosis is pretty certain. According to LEE, in those in whom a premature arc is found, it is very common to meet with irregular ill-defined muscular pains, such as would generally be put down as chronic rheumatism, yet with some doubt as to whether they are not in some degree neuralgic. Every physician must have met with such cases; the pains being annoying, difficult of relief, seated generally in the bellies of the muscles, causing more or less stiffness, sometimes tenderness, even accompanying, but sometimes consequent upon acute or chronic muscular rheumatism. Such pains pass under the common title of rheumatic, but their occurrence in so many instances in conjunction with the fatty arc, and often in a degree of severity proportional to its extent, has led to the supposition whether these vague pains may not be the result of fatty degeneration of the muscles. Rokitsansky and others have met with this disease in the muscles of the calf of the leg, viz., development of minute particles of free fat between the primitive muscular fibres, and it was attended with considerable pain. The muscles most exposed to fatty degeneration of the muscular tissue, are the voluntary muscles, especially of the lower extremities; it is also often met in the substance of the heart. If Sal.-Ammon. fails, Kali-hydroid, should be used. (11.)

Pente of Gottingen has used it as a powerful preservative against the ill-effects of suppression of foot-sweat. He dusts one stocking with a small spoonful of powdered Sal-Ammoniac, upon which some powdered chalk is to be spread. They are to be worn all night. In slight cases several repetitions of this process will suffice; in severe ones the stockings must also be worn during the day. The saline acid combined with the lime and Ammonia is disengaged; the feet feel an agreeable heat, followed by itching, and an abundant perspiration scarcely fails to set in. It is supposed to be most useful in suppressed foot-sweat in gouty and rheumatic subjects. (11.)

AMMONIUM-CITRICUM.

CITRATE OF AMMONIA.

AUTHORITIES.

Waring's Therapeutics. (44.) Peters. (11.)

GENERAL REMARKS.

A solution of Citrate of Ammonia may be made extemporaneously by saturating twenty grains of Carbonate of Ammonia, in six drachms

of lemon-juice. It most nearly resembles the acetate of Ammonia in its properties, may be used in almost all the diseases in which that is useful, and is rather more pleasant to the taste. In common parlance it is termed febrifuge and refrigerant. The experience with it is mainly clinical. (11.)

Stomach.—In *gastric irritation* depending on an atonic or relaxed condition of the mucous follicles, it is frequently productive of marked benefit. It is said frequently to remain upon the stomach when other medicines are rejected. (44.)

Kidneys.—In *diabetes*, Prout considers it as the best diaphoretic we can employ, but says that it requires to be steadily persevered in, and to be aided by other remedies. A few drops of *Digitalis* will accomplish more against a profuse flow of urine than huge doses of diaphoretics. As the inhalation of chloroform frequently causes a temporary *saccharine diabetes*, homœopathists should try this remedy in true diabetes. (11.)

Fever and Inflammation.—In the latter stages of inflammatory and febrile attacks the Citrate of Ammonia is said to be not only agreeable and refreshing, but also useful as a refrigerant and diuretic.

In *scarlet-fever* it is favorably spoken of by Dr. Watson. If the pulse be feeble and without hardness he advises it to be given with an excess of Ammonia. In these cases it was a favorite remedy with the celebrated Dr. Cheyne. (44.)

AMMONIUM-PHOSPHORICUM.

PHOSPHATE OF AMMONIA.

AUTHORITIES.

Dunglison's New Rem. (16.) Braithwaite's Retrospect. (14.)

GENERAL REMARKS.

Phosphate of Ammonia is a result of the addition of Ammonia to a somewhat concentrated solution of phosphoric-acid.

THEORETIC INFERENCES.—From the facts of the frequent existence of lithuria in gout and rheumatism, and the sudden elimination of uric-acid, and that when chemists have examined the structural thickenings in those diseases, they have found deposits of earthy matter, consisting for the most part of soda and lime, and from other considerations, Dr. Buckler infers that uric-acid exists in the blood,—not in a free state, or it would be passed continuously, but in a state of combination with soda or lime, or both. The predominance of lithic-acid in the urine, he considers, generally heralds recovery from an attack of gout or rheumatism. "Taking into account," observes Dr.

Buckler, "these two prominent facts, viz., the excess of lithic-acid found in the urine at the period of convalescence from an attack of gout or rheumatism, and the subsequent deposit of soda and lime in the white tissues, it occurred to me, that during the existence of these diseases, the lithic-acid might exist in the blood, in a state of combination with soda and lime, in the form of insoluble compounds, which the kidneys and skin refuse to eliminate. If then, any agent could be found capable of decomposing the lithates of soda and lime existing in the blood, and of forming in their stead two soluble salts, which would be voided by the kidneys and skin, we should thereby get rid of the excess of fibrin in the blood, the symptomatic fever, and the gouty and rheumatic inflammation, wherever seated, which have been excited by the presence of these insoluble salts. It occurred to me that phosphate of Ammonia might be the agent, provided it could be given in sufficient doses to answer the end without producing any unpleasant physiological symptoms. It would form, in place of the insoluble lithate of soda, two soluble salts, the phosphate of soda, which is remarkably soluble, and the lithate of Ammonia, also soluble, and both capable of being readily passed by the skin and kidneys. The excess of uric-acid would then be got rid of in the shape of lithate of Ammonia, and the soda floating in the round of the circulation, instead of being deposited, as it were, like an alluvial formation in the substance of the fibrous and cartilaginous tissues, would be taken up by the phosphoric-acid, and eliminated from the system." (16.)

On the Tissues.—Fibrous Tissue. Dr. Buckler found that the *thickening of the white tissues*, of long standing, disappeared under its continued use; that it was decidedly serviceable in attacks of gout and acute rheumatism, and that in many old hospital cases of chronic rheumatism, the patients without a single exception, declared themselves better. In every instance in the cases reported, it was found that where lithic-acid was present in the urine, it at once disappeared under the use of phosphate of Ammonia. From this he was led to suspect that it might prove also serviceable for dissolving *uric-acid calculus*; but he had had no opportunity of testing its efficacy in this respect. (16.)

Clinical Remarks.—These cases, however, are not considered conclusive, as this salt exists in the urine in a state of health, and we have no reason to believe that it is not present in gouty and rheumatic diseases also. Moreover, although there may be generally a predominance of uric-acid in the urine, in gout and rheumatism, it is by no means clear that these diseases are dependent on contamination of the blood with undischarged urea and uric-acid, as has been maintained by many. Phosphatic deposits indeed are frequently observed in conjunction with gouty affections, and in many instances it would seem, that tophaceous concretions contain no urate of soda, but in its stead phosphate of lime. In numerous cases of gout the phosphatic predominance is indeed marked. (16.)

M. Mattei of Bastia has published some cases, however, which appeared to him to exhibit its efficacy in doses of about 30 grs., and Dr. S. Edwards confirms its advantages in diseases which appear to depend on an excess of lithic-acid or lithates in the blood. In chronic articular rheumatism it appeared to him especially beneficial. His observations do not extend to its power as a solvent of lithic calculi, but his experience leads him to speak positively of its efficacy in arresting their increase, and perhaps formation. M. Mattei subsequently says, he has used it in almost every variety of gout and rheumatism, and nearly always with the most beneficial results. He had frequently warded off attacks of gout by its early employment. Dr. Edwards had given it in fifteen cases, and in none had symptoms of heart-affections exhibited themselves. He had found it of essential service in those swellings which occur *after gout*, and also in preventing the accretion of chalk-stones. He had also directed it as an external application when these deposits appeared to be forming.

Dr. Ruschenberger's experience, however, has been quite the reverse of this in chronic rheumatism. He has used it in a number of cases, but records as the result of his observation, that it is "useless in the treatment of chronic rheumatism." The urine was tested before and during its use, but no change was detected in its constitution by reagents, nor was there any modification in its specific gravity or quantity. (16.)

Dr. Edwards (referred to above) speaks quite confidently of the benefit derived from the use of this remedy in numerous affections; and it has been his practice to administer it at once in lumbago, pleurodynia, ischio-gluteal rheumatism, epicranial, cervical, and facial rheumatism; and has found it of peculiar service. In muscular rheumatism, acute or chronic, he has employed it with more success than in any other. In one case also of rheumatic ophthalmia, after the subsidence of the inflammatory symptoms, the pains about the eye and brow were alleviated within about sixteen hours. With respect to gout, his opportunities of applying the remedy had been limited, yet numerous enough to enable him to speak with certainty of its good effects. He first assures himself that the digestive functions are regularly performed (administering aperients as necessary) and then orders the phosphate in water every eight hours. In the third case in which he employed the salt it was strikingly beneficial.

CASE.—A poor man, a dispensary patient, a very gouty subject, had had an attack for two or three weeks, being confined wholly to his bed, or arm-chair. He had tried most of the renowned remedies, with little or no relief. On a Wednesday afternoon he commenced taking the phosphate of Ammonia (two grains every eight hours,) and on the Friday morning following he attended at the dispensary, walking each way, and informed Dr. Edwards he had lost all pain, and that the swelling and stiffness were rapidly subsiding. To use his own words, "the second dose had acted like a charm."

On the Tuesday following he began his work again as a mason. He was ordered to continue the use of the remedy for a time, this being considered a point of some importance. (14.)

On the Mucous Membranes.—In a trial made with it by Dr. Voigt, in doses only of about three grains, a series of alarming and highly irritative phenomena occurred, caused he thinks, by the violently irritating action of the salt on the stomach: yet Dr. Voigt had good reason to suppose that the preparation employed was pure. In commenting on this case, however, Dr. Ruschenberger, of the U. S. naval hospital, N. Y., states that he has employed the phosphate of Ammonia in nine cases, in doses of ten grains, repeated every four hours. In no case was the article used for less than a week, and in several it was continued three, four and even six weeks.

LOCAL EFFECTS.

Kidneys and Urinary Organs.—*Clinical Remarks.*—M. Mattei remarks that as a solvent of lithic calculi, he has no positive experience of its efficacy, but he testifies positively to its powers of arresting the increase, and perhaps the formation of them. In lithic-acid gravel, he has frequently used it, and experience has taught him, that it creates a very rapid decrease and disappearance of the red crystalline sediment.

It may be formed by saturating a somewhat concentrated solution of Phosphoric-acid with Ammonia. It doubtless resembles the Acetate and Citrate of Ammonia in its action, although it must have some of the effects peculiar to Phosphorus. It has recently been brought forward by Dr. Buckler of Baltimore, on chemical considerations, as a new remedy for gout and rheumatism, as a solvent of uric-acid calculus, and for diseases both acute and chronic, when connected directly with the lithic-acid diathesis. The experience with it is purely clinical.

Dr. Buckler's theory is based on the following facts: the frequent existence of lithuria in gout and rheumatism; the excess of lithic-acid which is found in the urine at the period of convalescence from an attack of gout or rheumatism; and the quantity of urate of soda and lime which is found in the structural thickenings and tophi in chronic gout and rheumatism. Hence he infers that in gout and rheumatism the uric-acid exists in the blood, not in a free state, or it would be passed continuously, but in a state of combination with soda or lime, or both, in the form of insoluble compounds which the skin and kidneys refuse to eliminate. Hence the indication would be to find a remedy capable of decomposing the lithates of soda and lime existing in the blood, and of forming in their stead two soluble salts, which would be voided readily by the skin and kidneys. It occurred to him that Phosphate of Ammonia would be the proper reagent, for it would form in place of the insoluble lithates of soda and lime, two soluble salts, viz., the phosphate of soda, which is remarkably soluble, and

the lithate of Ammonia, which is also soluble, and both capable of being readily passed by the skin and kidneys. The excess of uric-acid would thus be got rid of in the form of lithate of Ammonia, and the soda floating in the round of the circulation, instead of being deposited, as it were, like an alluvial formation in the substance of the fibrous and cartilaginous tissues, would be taken up by the phosphoric-acid and eliminated from the circulation. The gouty or rheumatic inflammation which had been excited by the presence of the insoluble salts would abate, and the symptomatic fever and excess of fibrin would cease.

Gout.—This reads very well, but in gout at least, there is also very marked derangement of the stomach and liver; the most familiar of these ailments are impaired appetite, nausea, vomiting, flatulency, heartburn, acid eructations; the stools also are always unnatural, most frequently too pale in color; but sometimes dark-green and very offensive. In many instances a spontaneous recovery from gout occurs when the patient is attacked with nausea and vomiting, accompanied by acrid bilious discharges from the bowels; and these evacuations are often followed by immediate relief as to every local and constitutional symptom; sometimes the result will be an entire cessation of the paroxysm; at others the alleviation will be more partial; but repeated experience has convinced many martyrs to gout that the degree of relief obtained is always proportioned to the copiousness of the bilious evacuations. Pursuing this hint given by nature, when the spontaneous diarrhœa has been too scanty, Anthony White, late president of the Royal College of Surgeons of England, assists it with five grains of Calomel, which he says will then in a few hours produce copious bilious discharges; the gout would be gone, and he would be well again. He seems to infer that the remedy should be homœopathic to the curative endeavors of nature, not to the pathogenetic actions of the disease. (11.)

When WHITE took *Colchicum* singly, his dose was generally about sixty drops of the wine of the seeds, repeated every six hours. After three or four such doses the bowels were acted upon; the evacuations had the odor of the *Colchicum*; deeply tinted, scalding bile was passed, and he was well, for he needed no more. Hence, he infers, that, if a spontaneous evacuation of bile operates critically to the relief of the gouty paroxysm; if five grains of Calomel produce relief; if just so much *Colchicum* or other medicine produces relief, as is sufficient to cause a copious discharge of bile, then it is demonstrated that the diminished or altered state of the biliary secretion which is always a concomitant of gout, is not to be classed among the secondary phenomena of that disease.

Still it is to be supposed that Sir Benjamin Brodie knows as much about the action of *Colchicum* as Dr. Anthony White, and he thinks that *Colchicum* checks the secretions of the liver; (see Brodie on Joints, fifth English edition, p. 57.) where he says: "Wherever *Colchicum* is administered it appears to me to be advisable to give some

small doses of the *pilula hydrargyri*, or some other preparation of Mercury, at the same time, *with a view to prevent the former remedy from arresting the secretions of the liver.*"

Hence it would seem that Mercurius is most homœopathic in gout when the stools are dark-green and offensive; Colchicum when they are pale and light-colored. These two remedies are too much neglected by homœopaths; Mercury, it is well known, produces many pains which are called rheumatic, but which might just as well be termed arthritic; and we have a well-attested case in which a severe affection of the joints followed the excessive use of Colchicum. A few moderate doses of these remedies will greatly expedite relief from an attack of gout, and then the patient use of Bryonia, Cocculus, Pulsatilla, &c., as they are indicated, aided by abstemiousness in diet, and methodical exercise will prevent relapses. (11.)

Rheumatism.—Dr. Buckler found the Phosphate of Ammonia decidedly serviceable in attacks of gout and acute rheumatism, and that in many old hospital cases of chronic rheumatism, the patients without a single exception, declared themselves better, and begged for a continuance of the medicine. Dr. Mattei of Bastia has published some cases which appeared to him to demonstrate the valuable agency of the Phosphate of Ammonia in gout and rheumatism. Dr. S. Edwards found it especially useful in chronic articular rheumatism; subsequently he published his farther experience in almost every variety of gout and rheumatism, and nearly always with the most beneficial results. He had frequently warded off attacks of gout by its early employment. Before using it, however, he generally gave a cathartic, and in acute articular rheumatism he used other general and local treatment. He found it of great use in subduing the swellings which so frequently occur after gout, and speaks highly of its powers in preventing chalk-stones, as well as of arresting them when forming. In some few cases of gout he used a lotion of it with good and soothing effects, especially when a concretion of urate of soda seemed to be forming.

But Dr. Ruschenberger of the United States naval-hospital at New-York, used it in nine cases, in ten grain doses, every four hours, in no case for less than a week, and in several it was continued three, four or even six weeks; with relief in one case only.

NOTE.—According to the analysis of Berzelius, Phosphate of Ammonia exists in the urine in health. In Buckler's cases, in every instance, when lithic-acid was found in the urine, it at once disappeared under the use of the Phosphate of Ammonia. From this rapid disappearance of the acid from the urine he was led irresistibly to the conclusion that Phosphate of Ammonia must prove the best agent for dissolving uric-acid calculus. Dr. S. Edwards confirms its advantages in diseases which appear to depend upon the presence of an excess of lithic-acid or lithates in the blood. In lithic-acid gravel

he has frequently used it, and experience has taught him that it creates a very rapid decrease and disappearance of the red crystalline sediment. But Dr. Ruschenberger found it to exert no influence over the urine in rheumatism.

AMMONIÆ-SPIRITUS-AROMATICUS.

AROMATIC SPIRITS OF AMMONIA.

The aromatic Spirits of Ammonia is a weaker but much more pleasant preparation than the simple spirits of Hartshorn. It is rendered so by the addition of alcohol, water, and the oils of lemon, cloves, nutmegs and lemon-peel. As it is fitted to fulfil the same indication as the simple spirit, it is much more used on account of its grateful taste and smell.

Headache. It is often used in sick-headache, especially when there is great acidity of the stomach and the patient is pale, cold, and inclined to be faint.

In languor, syncope, hysteria and nervous debility it is said to prove very serviceable.

In the flatulent colic of children, from two to four drops in milk or water are said to afford more speedy relief than any other remedy.

In heartburn, nausea, and acidity of the prima-viæ, it often proves speedily effectual.

In amenorrhœa I have repeatedly used it with the most rapid and beneficial results. (11.)

A M M O N I A C U M.

GUM-AMMONIAC.

The Gum resin of Dorema-Ammoniacum; of Heracleum-Gummiferum.

AUTHORITIES.

Noack and Trincks, *Mat. Med.* (19.) Hahnemann. (1.) Waring's *Therapeutics.* (44) Wood's *Therapeutics.* (7.) Pereira, *Mat. Med.* (3.) Frank's *Magazine* (4.) Dierbach's *Mat. Med.* (6.) British *Journ. Hom.* (12.) Vogt's *Mat. Med.* (20.) Trousseau and Pidoux, *Mat. Med.* (38.) Peters (11.) Marcy (10.)

GENERAL REMARKS.

ORIGIN.—Ammoniac is the concrete juice of an umbelliferous plant denominated *Dorema-Ammoniacum*, six or seven feet in height, grow-

ing in Persia and Afghanistan. All parts of the plant contain a milky juice. At certain seasons this exudes through punctures made in the plant, and hardens in the shape of tears, which are collected for use. It is exported from Bushire, and usually reaches Europe and this country through the ports of Hindostan. Though usually imported from Bombay, it occasionally comes from the Levant.

PROPERTIES.—It comes either in the shape of tears, or in aggregate masses, and in both forms is often mixed with impurities. The tears, however, are preferable, as the purest may be selected for use. They are of an irregular shape, usually more or less globular, opaque, yellowish on the outside, whitish within, compact, homogenous, brittle when cold, and breaking with a conchoidal shining fracture. The smell of Ammoniac is peculiar, and stronger in the masses than in the tears. The taste is slightly sweetish, bitter and somewhat acrid. It is partly soluble in water, alcohol, ether, vinegar and alkaline solutions. Triturated with water it forms an opaque milky emulsion, called *lac-ammoniacum*, which, however, becomes clear upon standing. The alcoholic solution is transparent, but becomes milky by the addition of water.

It is said to be a *stimulant*, although Trousseau and Pidoux deny that it has any stimulant properties whatever, having taken it in two-drachm doses without observing any such effect. Still, large doses are said to cause congestions; violent pains in the head, especially in the occiput and forehead; pains in the eyes, and dim-sightedness; aching in the chest and spitting of blood; restlessness, loss of appetite, relaxation and weakness of the stomach, and diarrhœa. (11.)

Wood says, like many other stimulants it may be given so as to prove diaphoretic, diuretic and emmenagogue, although its principal action is manifested upon the pulmonary, gastric, intestinal and urinary mucous membranes. (11.)

Again, it is asserted that it is not merely a stimulant, but a *nervous stimulant*, although much less powerful and useful in nervous affections, (except in those which arise from primary disorder of the mucous membranes) than Assafœtida, Galbanum and Olibanum. (11.)

It is generally regarded as a trivial remedy, but that is only because it is so frequently used in inappropriate cases, and in too large or too small doses, and at improper times and stages of the diseases against which it is suited.

GENERAL EFFECTS.

On the Nervous System.—In addition to other properties it has been supposed to possess those of a nervous stimulant, in a somewhat less degree, however, than Assafœtida, and Galbanum. In this capacity it has been supposed to be useful in some affections of the optic nerve, in neuralgic and colicky affections of the bowels, in nervous and asthmatic affections of the chest; but in all these disorders its action

on the nerves is probably secondary to that upon the mucous membranes of these parts. (11.)

It is supposed by the old-school and by some homœopathic writers to act specifically upon the nervous system; but our experience does not corroborate this opinion. The phenomena to which it gives rise, when administered both in health and in disease, do not indicate any special action upon the nervous apparatus. (10.)

Nerves of Motion.—It probably acts more decidedly upon the nerves of motion than upon those of sensation; it seems to exert a specific action upon the motor nerves of the chest, abdomen and limbs, as evidenced by the cramps and pains in the chest and bowels, and the rheumatic pains in the limbs which it removes. (11.)

In large doses it acts as a cathartic, and as an irritant to the pulmonary mucous membrane, and sympathetically with these effects may arise some slight disturbance of the nerves of motion; but we doubt its power of producing any *direct* specific action upon these nerves. Gastric derangements caused by indigestible food, are sometimes followed by disorder of the motor-nerves but these effects are accidental and non-specific. (10.)

On the Vascular System.—Although when used externally it acts as a local irritant, often producing a papular eruption, and sometimes considerable inflammation of the skin, yet it is generally thought to exert a very moderate excitant influence over the circulation. In large doses it often occasions a feeling of heat, weight or uneasiness in the stomach. (11.)

Large doses cause sensations of chilliness, succeeded by slightly increased activity of the circulation, headache and other signs of feverish excitement. But its influence over the vascular system is not strongly pronounced. (10.)

On the Blood.—Its action on this fluid is unknown; it doubtless tends rather to increase the *white*, than the red globules. (11.)

Fever and Pulse.—Increased circulation in the capillaries; pulse small, corded, quick and hard; tendency to chilliness and perspiration.

On the Lymphatics and Glands.—It has generally been supposed to exert a specific action upon the lymphatics, glands and absorbents, and has been much used to promote the resolution of scrofulous tumors, chronic swelling of the joints, venereal nodes and tumefactions, and enlargements of the liver. It is said to increase the flow of lymph more than any other gum-resin. (11.)

On the Mucous Membranes.—This is apparently the great centre of the action of Ammoniacum; it doubtless acts more specifically upon these parts and upon the mucous follicles and muciparous glands than upon any other tissues. It is homœopathic to catarrhal affections of many of the mucous membranes, and also to catarrhal-rheumatic affections, and to scrofulo-spasmodic affections, such as scrofulous oph-

thalmia, when attended with much spasm of the eyelids; scrofulous bronchitis, when attended with spasmodic or asthmatic affections of the muscular-fibres of the bronchial tubes, and in chronic, or scrofulous affections of the intestinal mucous membrane, especially when attended with spasmodic or colicky affections of the bowels. Vogt says it acts more powerfully than *Assafætida* upon condensed secretions of mucus and lymph, influencing especially the mucous membranes of the chest, abdomen and genitals. Besides increasing the flow of mucus, it is said undoubtedly to possess the power of rendering a thick and tough secretion more serous, and hence is thought to be more suitable in blenorrhœas of viscid, than merely profuse mucus. In fact it is regarded as a *mucum incidens et resolvens*. It acts much less decidedly upon the serous membranes and cellular tissue. (11.)

We have often prescribed it when an allopathic physician, in chronic affections of the mucous membranes of the pulmonary, digestive and urinary organs, but with slight benefit. In a few instances we have administered it homœopathically in chronic asthma, coughs of aged persons, and chronic diarrhœas, but its effects have generally been unsatisfactory. (10.)

Skin.—A papular eruption is frequently caused by the application of ammoniac-plaster, which occasionally increases to a quite considerable degree of inflammation of the skin. Dr. Duncan has described a fatal case of diffuse inflammation following its use in a case of diseased knee-joint. (11.)

LOCAL EFFECTS.

Mind and Disposition.—Inability for mental labor. Not disposed to do anything; feeling of discomfort, laziness. Out of humor. Depression of spirits. (19.)

Clinical Remarks.—It is homœopathic to the dullness of mind and relaxation of body which so often arises in persons suffering from chronic mucous affections; also to some of the nervous and irritative phenomena which occur in like subjects, although less useful than *Ambra*, *Assafætida* and *Moschus*. (11.)

Head.—Feeling of heaviness of the head. Headache night and day. Pressing pain through the whole head; also in forehead, over the eyes. Semi-lateral tearing in the head. Itching and prickling on the scalp. (19.) Sense of dullness in the forehead, with dimness of sight. Tearing in the right side. Pimples on the borders of the hairy scalp. (32.)

✱ **Clinical Remarks.**—It is homœopathic especially to headache, arising from disease of the nasal-passages and frontal-sinuses. (11.)

Sleep.—Frequent yawning accompanied with a feeling of emptiness in the stomach, and watery eyes. Drowsiness during the day-time, restless sleep at night. (19.)

Eyes.—Pressure and tingling in the eye-ball. Feeling of dryness in the eyes, with sensation as if a foreign body were lodged between the

upper lid and the left eye. Dim-sightedness in the evening, and particularly early in the morning, immediately after rising, and heat in the eyes. Photophobia, even in cloudy weather. (32.) *Visus nebulosus*, appearance as if fogs and clouds were before the eyes. (19.) Wichmann speaks of four cases where after the use of Ammonicum, the eyes became affected as follows: sparks and streaks of light before the eyes, and dimness of sight almost amounting to blindness, all occurring in the evening. Similar effects have been observed in other cases by Stieglitz and Lentin. (26.) It is singular that all the attacks occurred in the *evening*; in some of the patients, rays and sparks seemed to shoot from the eyes; a burning candle seemed to be surrounded with rings of brilliant colors; others seemed to look through a thick fog, or cloud of dust. (11.)

Clinical Remarks.—The specific action of Ammoniacum and Galbanum on the optic nerve is undoubted; Schwartz recommends it in *amaurosis*, although he refers to Wichmann's observation that it causes dimness of sight. It would seem most homœopathic to affections of the eyes when attended with derangement of several or many of the mucous membranes. The tinctures of Ammoniacum and Galbanum are said to have been used locally with great success in various diseases of the eyes, such as scrofulous ophthalmia, ocular debility from prolonged reading, spasmodic motions of the eyelids, œdema of the eyelids, weakness of the lachrymal duct, &c. A compress moistened with the tincture has been applied over the eye for one hour, then removed for several hours, and reapplied again. A burning heat is first felt; it lessens gradually and ceases within an hour, when the compress becomes dry. Richter says he has used it with much benefit in *amaurosis*, and adds that he has frequently performed a complete cure in cases where he hardly expected it, and in some where the disease had actually been present for several years. (11.)

Ears.—Buzzing, roaring in the ears, with hardness of hearing. (19.) Increased secretions of wax. (10.)

Clinical Remarks.—It doubtless acts specifically upon the mucous membranes of the ears, and doubtless will prove a more useful local application than many others more frequently used. (11.) It has been useful in deafness, accompanied by great sensitiveness of the inner ear, and large secretion of wax. (10.)

Nose.—Frequent sneezing. Great dryness of the nose on awaking. (19.) Sneezing, followed by a copious flow of mucus. (32.)

Clinical Remarks.—It is far more homœopathic to influenza, and acute and chronic catarrh of the nose than many other remedies which are more frequently used. (11.)

Face.—Pale countenance with sick feeling, preceded by frequent change of color. Drawing in the right malar-bone, towards the temple. Dartings from the region of the lower jaw, to the interior of the mouth. (32.)

Clinical Remarks.—It is homœopathic to some neuralgic affections about the liver and cheeks which arise from a catarrhal affection of the sinuses, anterior and other nasal passages. (11.)

Mouth, Pharynx, &c.—Great flow of saliva, scraping, burning sensation in the throat and œsophagus. (19.) Dryness of the mouth and throat, early in the morning on waking. Sense of fullness in the fauces and pharynx, with nausea. (32.)

Clinical Remarks.—It is homœopathic to many catarrhal affections of the mucous membrane of the mouth and pharynx; also to many cases of chronic dyspeptic sore-throat, the so-called clergymen's sore-throat or chronic pharyngitis, which is so often mistaken for chronic bronchitis. (11.)

It afforded prompt and permanent relief in a case of dryness of the throat, most troublesome in the morning, but always increased by inhaling the fresh air. The patient was a lady, twenty years of age, well in other respects, and had been afflicted with the ailment for more than one year. (10.)

Appetite, Gastric Symptoms.—Want of appetite, eructation after eating. Disgust, with inclination to vomit; impaired digestion, (19.) insipid taste. In full doses it readily disturbs the stomach.

Clinical Remarks.—Both schools advise it in weakness of digestion. Noack says, it is remarkable that Wibmer says it causes weakness of digestion, yet calls it a stomachicum. It is most homœopathic when there is a thin yellowish coating on the tongue, tastelessness, or insipid sweetish taste in the mouth in the morning, or a nauseous bitter taste in the mouth, disappearing after eating, loss of appetite, eructations after eating, nausea almost to the point of vomiting and great weakness of digestion. In short, it is homœopathic to many gastric and bilious states, especially when occurring in scrofulous subjects. (11.)

Liver, Spleen and Mesenteric Glands.—*Clinical Remarks.*—It has been used in disturbances of the biliary secretion, and in swelling, inclination to induration, and already formed induration of the liver. Schneider advises it in chronic jaundice; in old obstructions and infarctions of the liver, spleen and pancreas. It is most homœopathic when there is a thin yellowish coating upon the tongue, and nauseous, bitter taste in the mouth, disappearing after eating. Still Wood says it has only been prescribed in obstructions and engorgements of the abdominal viscera, from a vague notion of its deobstruent power, although Paris found it valuable in mesenteric affections, by correcting the viscid mucous secretions of the intestines; hence it may be most useful and homœopathic in those affections of the liver and other abdominal organs, which commence in disease of the mucous membrane of the duodenum and are propagated along the ductis communis to the biliary ducts, gall-bladder, &c. It deserves attention in scrofulous affections of the gastro-intestinal, and biliary mucous membranes. (11.)

Abdomen.—Cutting pain in the abdomen. Wandering pains in the abdomen, chills and large slimy evacuation. (19.) Pinching. Violent colic. Violent pressure in the pubic region. (32.)

Clinical Remarks.—In a peculiar chronic affection of the stomach and bowels, marked by constant distress and burning about the epigastrium, continual rumbling and fœtid flutulence, with papescent stools and general distress from and mal-assimilation of the food, Ammoniacum (1st to the 3d trit.) will often prove a remarkable palliative, and frequently remove the disorder. (46.) It should be thought of in chronic dysentery; and when there is a mucous diarrhœa with colicky pains and flatulence, connected with a feeble, or torpid, or scrofulous state of the alimentary mucous membrane, and especially when this condition happens to be associated with a chronic cough, there is a double indication for its use. Some authors speak highly of its utility in long and obstinate colics depending upon thick mucous matter lodged in the intestines. (11.) In colic pains and chronic diarrhœas accompanied by cutting pains in the abdomen, great weakness, and bilious, mucous discharges, it has occasionally been serviceable; but it cannot always be considered a remedy of much importance. (10.)

Stool and Anus.—Soft stool with discharge of flatus and rumbling in the abdomen. Mucous diarrhœa. Pressure in the rectum (19.) Insufficient stool; retention of stool. (32.) Fluid stools follow large doses.

Clinical Remarks.—It is homœopathic to mucous piles; to mucous diarrhœa, and to many other chronic affections of the intestinal mucous membrane. Noack recommends it in diarrhœa mucosa when attended with chills, cutting pains in the abdomen and profuse slimy stools; also in colic with diarrhœa, when there are violent cutting pains in the bowels, soft pappy stools, with profuse discharge of wind and much rumbling in the bowels. It is also recommended in the dominant school in abdominal cramps and flatulent colic. In all these cases, if smaller quantities fail, moderate doses of *Lac-ammoniacum* will often prove useful. (11.)

Urinary and Genital Organs.—Increased secretion of urine; the urine contains a considerable quantity of urea and lactic acid. Burning in the urethra. A few drops come out after micturition. Stinging in the right spermatic cord, and penis. Itching of the pubic region. (19.)

Clinical Remarks.—In passive dropsy it has been advised by Fordyce, but it is a remedy of inferior value. (44.) Frank says it has been used externally with success in many cases of hydrocele, especially in young persons. It should be thought of in chronic gonorrhœa and leucorrhœa, in diseases of the spermatic cord; in tendency to diabetes, in the uric- and lactic-acid diatheses, and in the peculiar forms of indigestion and urinary derangement which attend them. Its action on the urinary organs is said to be inferior to that of the balsams, but greater than that of any other gum-resin; it

is most homœopathic when there is an increased flow of urine, followed by dripping of a few drops, the urine being loaded with lactate of urea. It has been advised against hæmaturæa and diabetes. (11.)

Sobernheim says it causes a congestive state of the uterus, and even excites a flow of blood from it, and hence has obtained the reputation of an excellent emmenagogue, and has in fact afforded excellent service in amenorrhœa when there was local debility or torpor of the uterine mucous membranes. Schneider has recommended it in menostasia and dysmenorrhœa when arising from obstruction in the portal system, and in irregular menstruation. Also in amenorrhœa arising from chlorosis and in those hysterical affections which attend these disorders. (11.) It may prove useful in some cases of dysmenorrhœa and partial retention of the menses arising from a scrofulo-catarrhal thickening of the mucous membrane of the cervix. (11.)

Larynx and Trachea.—Roughness of the throat. Continual tickling without any desire to cough. (19.)

Clinical Remarks.—The complaints in which it is most frequently used are chronic catarrh, asthma and other pectoral affections, attended with deficient expectoration, without acute inflammation, or with a too copious secretion from the bronchial mucous membrane, dependent upon debility of the vessels.

Chest.—The breathing is short, loud and accelerated, with anxiety, oppression and stitches in the left half of the chest, during inspiration. Pressure in the chest; dullness and numbness of the posterior part of the right half of the chest; with subsequent pressure deep in the chest. (32.)

Clinical Remarks.—In spasmodic asthma, *Ammoniacum* often proves highly serviceable, relieving the symptoms in a remarkable manner. It is best given in alternation with *Scillæ*, or with a small portion of *Hyosciamus* or *Conium*. Plasters of *Ammoniacum* applied to the chest also afford evident relief. (44.)

In hysterical asthma it also proves most useful. It may be alternated with equal doses of *Assafœtida*. (44.)

In asthenic pulmonary complaints, it proves useful by promoting expectoration when this is deficient, and by assisting its expulsion, when it accumulates in the air-passages, and the patient has not strength to expectorate. (44.) Pereira says in chronic cough with deficient expectoration, or in chronic catarrhs and asthmatic affections, with profuse secretion, it sometimes affords slight relief; but although he has seen it extensively employed, he had observed it to prove useful in a few cases only. Quarin, Wedekind and Selle advise it when the mucus is tough, profuse and hard to be expectorated. Peter Frank in chronic pulmonary and bronchial catarrhs, with nauseous, thinly-fluid and purulent-like expectoration; Brumer, Quarin and Behrends in mucous asthma; also in asthenic inflammation of the lungs, especially when the expectoration is checked. In alternation with Nitric acid it is said to be an excellent remedy in cases where large accumulations of purulent or viscid matter exist with feeble or difficult expectoration. (11.)

Especially in aged people who suffer during cold weather from bronchial affections attended with very great accumulations of mucus, and much difficulty in raising it up, is this medicine of service. In these cases, it should be employed in appreciable doses. It is also useful as a palliative in advanced stages of phthisis, and pneumonia. (10.)

Upper Extremities.—Lancination in the shoulder-joints. The left arm feels weak; rheumatic pain; pain as if bruised, particularly in the elbow and left wrist-joint, accompanied with tearing in the right hand. (32.)

Clinical Remarks.—It has been recommended in joint- and hip-pains, and in gouty nodes; but it is more homœopathic to pains seated in the lymphatic vessels, and which are often mistaken for rheumatism. It is most specific against pains in the joints and limbs, when attended with affections of one or several mucous membranes, with derangement of the urinary organs, and excess of lactate of urea in the urine. (11.)

Lower Limbs and Loins.—Weight and pressure in the lumbar vertebræ, stitches in the loins, particularly during an inspiration. Rheumatic pain in the left side of the region of the pelvis; stitches over the hip, when walking, obliging him to limp; in the right hip-joint, when sitting. Darting pain in the left thigh, along the crural nerve; violent pain over the knee, when walking. The knee feels swollen in the evening, when sitting, with pinching in the bend of the knee; stitches in the right knee. Stitches and tearing in the tibie and tarsal-joint. Pinching, burning, tearing, drawing in the left foot. Tingling in the right foot. Swelling of the toes. (32.)

General Symptoms.—Stinging, tearing, pricking pain, here and there, especially in the lower extremities. Uneasiness. Tired feeling and heaviness of the limbs, even after the slightest exertion. (19.)

AMPHISBÆNA-VERMICULARIS.

AUTHORITIES.

MURE, in Homœopathic Provings, by James W. Metcalf, M.D. (51.)

GENERAL REMARKS.

This is the poison of a genus of serpents belonging to Brazil and other parts of South America. It derives its name from the fact that its head is so small and its tail so short and thick, as to be with difficulty distinguished one from the other: while at the same time it has the power of moving either backwards or forwards, as occasion requires. The poison has been obtained by cutting off a portion of the lower jaw and immediately triturating it. The dried and powder-

ed flesh of the *Amphisbæna*, is said to be administered by the natives of Brazil as a specific in dislocations, sprains and bruises.

It is said by naturalists to be destitute of fangs and perfectly harmless and inoffensive, living for the most part upon ants and other insects; if this be the case, this poison will be somewhat apochryphal. In point of fact all of Mure's provings are more or less suspicious and unreliable.

LOCAL EFFECTS.

Head.—Heaviness in the forehead and parietal regions. Great confusion and vertigo with swinging sensation, which seems to tend to one side and then to the other. Repeated strokes in the right side of the forehead. Sweat on the head. He experiences dreadful headaches. Confusion as from intoxication when turning the head. (51.)

Clinical Remarks.—It promises to be useful, in some cases of headache with great dizziness. (11.)

Eyes.—Pain as from a sty in the internal canthus of the right eye. Continual trembling of the right upper lid, and also of the left. Pain and lacerations, and feeling as if a grain of sand was in the eye. Fatigue of the eyes in the evening; pain and pricking when looking at the light; lacrymation and constriction of the left eye. (51.)

Clinical Remarks.—It may prove useful in involuntary twitching of the lids, and in great debility of the eyes, or morbid sensibility to use. (11.)

Face.—Prickings and heat over the cheek-bone, and dull pains on the cheek and right side of the inferior maxillary bone. Pains and lacerations attacking the whole right side of the head. Pains in the right lower jaw and some swelling, aggravated by the air and moisture. Very large and painful pimple on the left side of the upper lip, ending in suppuration. (51.)

Clinical Remarks.—It seems homœopathic to some neuralgias about the face, to gum-boils and acne. (11.)

Mouth and Throat.—The teeth feel prolonged, with tooth-ache worse in the afternoon and evening. He cannot chew without pain, but the impression of liquids is not painful. Swelling of the tonsils. Difficult deglutition. (51.)

Clinical Remarks.—It seems homœopathic to inflammation of the lining membrane of the alveolar processes, and to some inflammations of the throat and tonsils. (11.)

Abdomen.—Protrusion of an umbilical hernia. Coldness and pains in the epigastrium. Tearing pain in the navel all day. Strangulation of an inguinal hernia. The hernia is painful, and pent-up air is perceived in it. Laceration like a dagger-stroke in the navel. (51.)

Clinical Remarks.—The above are doubtless entirely accidental effects in ruptured persons and in no wise attributable to the drug. (11.)

Extremities.—Very painful swelling of the arm (2d day). Cramp in the legs. They drag in walking as though paralysed. (51.)

Clinical Remarks.—Like Lachesis it may prove useful in some cases of simple or phlegmonous erysipelas; and in cramps and partial paralysis of the limbs. (11.)

Skin.—Red miliary eruption (dry itch cured) in extensive plates of an elliptic form; furfuraceous desquamation takes place in every spot when the eruption is healed. The spots of miliary eruption of little red pimples extend over the whole chest, neck, and back, with itching, more violent in the morning and diminishing until evening. A white vesicle forms by degrees on every papule and discharges a clear lymph, after which the eruption dries up on the fifth day. (51.)

Clinical Remarks.—It is homœopathic to some forms of eruptive disease, especially those of an erysipelatous or malignant character. (11.)

General Symptoms.—Debility. Sadness and great lassitude in the morning, removed when walking. Mild, tender sadness. Great pain throughout the vertebral column, aggravated by walking, moving the arms and stooping. Depression. Ennui. Impatience. (51.)

Clinical Remarks.—It is homœopathic to great exhaustion, such as occurs after grave or typhoid fevers, and depression of spirits; it seems to be homœopathic to spinal tenderness. (11.)

AMYGDALA-AMARA.

BITTER ALMOND.

AUTHORITIES.

Pereira's Mat. Med. (3.) Wood and Bache. (7.) Peters. (11.) British and Foreign Med. Chir. Rev., (18.) Marcy. (10.) Frank's Magazine. (4.) Christison. (9.) Taylor's Med. Jurisprudence. (8.)

GENERAL REMARKS.

Bitter almonds are brought chiefly from Mogadore. In external appearance they resemble the sweet almond, but are somewhat smaller. They are distinguished by their bitter flavor, and when rubbed with a little water by their remarkable odor, resembling the fragrance of peach blossoms. A crystallizable substance, called *amygdalin*, has been found to be a constituent of bitter almonds, and from four pounds of them Liebig obtained one ounce of pure amygdalin. It is white and odorless, with at first a sweet and then a bitter taste. It is quite soluble in boiling alcohol and water, but insoluble in ether. Submitted to distillation with Nitric-acid, it yields hydrocyanic acid, oil of bitter almonds, formic acid, and some benzoic acid.

(3.) It was formerly supposed that the hydrocyanic acid and essential oil were primary constituents of the seeds, and it was to them that their peculiar operation upon the system was ascribed. It was, however, ascertained by M.M. Robiquet and Boutron that these principles do not pre-exist in the almond, but result from the reaction of the water; and Wöhler and Liebig proved, what was suspected by Robiquet, that they are formed out of the substance *amygdalin*, the characteristic constituent of the almond. (7.)

There are certain vegetable substances, not commonly regarded as poisons, but which become so by their reaction on one another. This is the case with the two substances, *amygdalin* and *emulsin*—the former obtainable from the bitter almond, the latter from the sweet. So long as these substances are kept apart they are innocuous, but when brought together the *emulsin* transforms the *amygdalin* into anhydrous prussic acid, and poisonous results at once ensue. Thus if *emulsin* be introduced into the stomach of an animal and *amygdalin* in its rectum, or *vice versa*, no effect is produced, the substance introduced into the rectum not being absorbed; and the same is the case if these substances be separately introduced into parts of the areolar tissue remote from one another. But if both of them are introduced separately into the most remote parts of the circulating current, their union takes place with rapidity, and immediate death is the result, the body exhaling the odor of prussic acid. This result is also produced by the introduction of *amygdalin* into the digestive cavity, and of *emulsin* into the blood; but it does not take place when the *emulsin* is introduced into the digestive cavity and the *amygdalin* into the blood; for the *amygdalin* being of the nature of a ferment, is not absorbed.

TOXICOLOGICAL EFFECTS.

This fruit is more or less poisonous to all classes of animals; but as is the case with most vegetable poisons, the larger herbivora are much less powerfully affected by them. Three quarters of a pound of bitter almonds given to a horse, merely caused dullness and a small pulse, while one drachm has killed some of the smaller animals, as pigeons. In small doses they sometimes act on man as irritants to the digestive organs, occasioning nausea, vomiting and purging. On some their effects are, first, sickness, generally tremors, then vomiting, next a hot fit, *with an eruption of urticaria, particularly on the upper part of the body. At the same time the head and face may become swelled very much*, and there may be a general feeling like intoxication. The symptoms last only a few hours, and the rash does not appear and disappear as in *urticaria*. In large doses bitter almonds have caused serious and some times fatal consequences. (3.)

Pierer mentions that three children after eating some of these seeds, were attacked in a few minutes with nausea, vomiting, loss of consciousness, loss of speech and convulsions. (3.)

Mr. Kennedy has noticed the case of a stout laborer who died after the use of a great quantity of bitter almonds.

CASE 1.—A lad, aged fifteen, got access to a cask of bitter almonds, and consumed a large quantity of them with sugar. After a time he felt a pleasing sensation, then became suddenly giddy, fell down, and lost his consciousness and recollection. He was found lying insensible near the cask.

Treatment.—Ammonia and Carbonate of Potash were administered, and the stomach-pump employed, till he was much relieved; then emetics were given and he threw off in the course of half an hour, as much as eight ounces Troy of bitter almonds. (48.)

Clinical Remarks.—It is homœopathic to giddiness, loss of consciousness and some forms of nervous and venous apoplexy. (11.)

CASE 2.—A boy, aged three, was attacked soon after eating bitter almonds with pains in the belly, and could not stand up; he vomited; his eyes were closed, he was unconscious, cold, and limbs relaxed. His face was quite pale; lips, nose and ears white and cold; the arms and legs also cold and relaxed; his belly was not tense but soft, and scarcely warm; the pulse and respiration scarcely perceptible; the heart beat with but little energy; while the mouth was so tightly closed that it could scarcely be opened by any means; he paid no attention to loud talking, but vomited when he was shaken.

Treatment.—Emetics were followed by vomiting of bitter almonds, and he recovered in a few days. (48.)

Clinical Remarks.—It is homœopathic to syncope and exhaustion, with great paleness and coldness of the body, and feeble pulse; also to lock-jaw. (11.)

CASE 3.—A man, aged seventy, with strangulated hernia, received an emulsion of twelve ounces of bitter almonds; he took three-quarters of this in thirty-six hours, when the following signs of poisoning occurred: His face was yellowish-grey and moist, eyes sunken, breathing heavy, with oppression of the chest, pulse small, tongue dry and somewhat coated, skin blue and bluish red, especially upon the scrotum where the blue verged upon a greenish yellow, so that the genital organs seemed gangrenous; the knees were drawn up against the body; the head drawn back between the shoulders; the urine was scanty and passed with pain; bowels constipated; the head was confused; the limbs weak and heavy, especially the right thigh.

Treatment.—A solution of Carbonate of Potash in distilled water as recommended by Schaub, removed all danger in twelve hours. (4.)

Clinical Remarks.—It is homœopathic to excessive venous congestion, with great debility of the vascular system, and spasmodic irritation of the muscular. (11.)

CASES 4, 5 and 6.—Two girls, aged eight and three years, and a boy, aged six, ate from four to six bitter almonds a piece. In five

minutes the little girl was taken with nausea and vomiting, and became unconscious, speechless and almost motionless.

Soon after the other girl, without previous complaint fell backwards into such violent convulsions that her parents thought she had an attack of epilepsy, to which she had previously been subject; she then vomited, revived for a few moments and again became stupefied. They recovered in one and three hours each without taking anything but a few cups of tea. They had not the slightest recollection of the attack.

The boy only experienced a little nausea.

Clinical Remarks.—It is homœopathic to epileptic attacks when attended with nausea and vomiting, and followed by great exhaustion and stupor. (11.)

THE ESSENTIAL OIL OF BITTER ALMONDS

is active as a poison and has repeatedly been the cause of death. It is stated that in one year the daily papers of London furnished accounts of ten cases of poisoning by it. It is about four times as strong as the medicinal hydrocyanic-acid of the United States Pharmacopœia. It is of a yellow color, has a bitter acid taste; the almond flavors and essences so much used in cooking are solutions of the oil in spirit, and often prove highly dangerous in the hands of ignorant people. Enough Prussic-acid is contained in less than an ounce of most of these flavors to produce fatal effects and it is evident that smaller quantities might have the same result in children. Dr. MacLagan states that the ordinary essential oil consists of a peculiar oil (hydruret of benzule) to which its peculiar aroma and pungency are due, associated with anhydrous Prussic-acid. The Prussic-acid can be separated from the hydruret of benzule without impairing the peculiar flavor of the oil, and yet leaving it comparatively innocuous. It will not answer merely to agitate the oil with a large excess of lime or caustic potash, as is usually done, and then distilling it, for the Prussic-acid is not thus sufficiently separated; a salt of Iron should be employed, which fixes it more effectually. Why the deadly ingredient should be allowed to remain in it, if it can be so readily removed, it is not easy to understand, unless the dominant school are more careless and reckless of human life than we are willing to suppose; although the homœopathists have used Aconite for fifty years and more, without a single case of poisoning by themselves or their pharmacutists, while in the few years that allopathists have used it, cases of poisoning can be counted by scores (see Aconite, pp. 95 to 106). The placing of restrictions upon the sale of this and other articles of a pernicious character for the purpose of flavoring or ornamenting articles of food and confectionary, is of still more urgent importance than any restraint upon Arsenic. Prussic-acid is rather too potent a poison to be distributed to cooks and confectioners disguised with the pleasant odor of bitter almonds. (11.)

The volatile oil, however, might probably be substituted with advantage for hydrocyanic-acid; as the acid contained in the oil is much less liable to decomposition, remaining for several years unaltered, if the oil is preserved in well-stopped bottles. It is four times as strong as the hydrocyanic-acid, and must therefore be given with caution. (9.)

CASE 7.—A child, aged eight and a half years, took a teaspoonful of *ratafia*, containing seven drops of the oil of bitter almonds. She became immediately insensible, but had no spasms, the limbs were relaxed, the jaws, however, firmly closed, the eyelids closed, but the eyes brilliant and glassy, although without expression.

Treatment.—Cold affusion, emetics and stimulants restored her, and in twenty minutes her consciousness returned. (8.)

Clinical Remarks.—This case also shows its homœopathicity to loss of consciousness, great prostration and lock-jaw. (11.)

CASE 8.—A woman gave her child the expressed juice of a handful of bitter almonds to cure worms. The child who was four years old, was immediately attacked with colic, swelling of the belly, giddiness, locked-jaw, frothing at the mouth, general convulsions and insensibility, and died in two hours. (8.)

Clinical Remarks.—It is homœopathic to *colic*, meteorismus, vertigo, lock-jaw, general convulsions, and stupor. (11.)

CASE 9.—A druggist swallowed by mistake, half an ounce of "almond-flavor." In half a minute he fell down in a state of syncope; his face being deadly pale, and his pulse imperceptible. In a few minutes he came to and vomited food and bile; delirium with slight convulsions came on; he then became sensible again and conversed upon his condition; but soon gradually relapsed into delirium, his eyes being prominent and brilliant; in a few minutes he became sensible for the third time and shortly recovered. He took about the equivalent of half a drachm of the oil.

Clinical Remarks.—It seems to act as a depressor to the vascular system, and an irritant to the muscular; it is occasionally homœopathic to delirium. (11.)

CASE 10.—A boy, aged twelve, was accosted by another in the street, who had a medicine-basket on his arm, from which he took a bottle and offered him some liquid, which he called almond-oil; he took about a tablespoonful, and experienced shortly afterwards a burning sensation in his throat, and in about ten minutes he sat down on a door-step and became insensible. There were violent tetanic convulsions with complete opisthotonos, the head and neck being drawn backwards, the elbows drawn behind the back, and firmly fixed in that position; the jaws were quite fixed; there was complete insensibility, and the pulse was scarcely perceptible.

Treatment.—Cold affusion to the spine and the stomach-pump; the stomach was well washed out with a large quantity of water, which was returned, smelling strongly of Prussic-acid. During the

treatment he suffered with strong convulsive twitchings of the muscles; he recovered in about an hour. (48.)

Clinical Remarks.—It has again proved homœopathic to stupor and unconsciousness, with violent tetanic convulsions, opisthotonos, and great depression of the vascular system. (11.)

CASE 11.—J. D——, four years of age, took by stealth, four or five drachms of oil of bitter almonds, which was about being used as a flavoring extract. On reaching the passage adjoining, he staggered and fell, apparently insensible, and on a medical man being summoned, the following symptoms were present; countenance very much flushed; eyeballs remarkably prominent, accompanied with a rolling motion, and nearly protruding from their sockets; pupils widely dilated, and insensible to light; pulse full and strong, but slow; breathing stertorous; complete opisthotonos, and frequent convulsive action of the muscles of the face and neck. From the rigid contraction of the jaws, some difficulty was experienced in administering a strong solution of the sulphate of zinc; the action of which was aided by irritating the fauces with a feather. This expedient was adopted to save time, while the stomach-pump was got in readiness. This being procured, the tube was speedily introduced into the stomach (not until the little patient had nearly divided it with his teeth,) several portions of warm water were injected, which soon returned with a good deal of undigested food, emitting strongly the characteristic odor of bitter almonds. Warm water was thrown into the stomach, until the fluid drawn up no longer presented the peculiar smell of the poison. Cold affusion was now resorted to, and continued for some time, brandy and water administered, and repeated at frequent intervals. The patient having fallen into a state of collapse, mustard-cataplasms were applied to the epigastrium and the whole length of the spine; on the establishment of reaction, castor-oil was administered, which acted freely, and we soon had the satisfaction of observing returning consciousness. In half an hour he was sufficiently recovered to permit of removal, and in two hours he had entirely recovered his usual animation and cheerfulness.—*Lancet*, March, 1855.

Clinical Remarks.—This is one of the few cases in which the vascular-system was irritated in like manner as the muscular-system frequently is; it is probable, however, that the flushing of the face was rather venous than arterial, and may have arisen from the pressure upon the blood-vessels and consequent retardation of the blood, caused by the severe spasmodic pressure upon them. (11.)

Sir B. Brodie happening to touch his tongue with a probe which had been dipped in the oil, suffered almost instantaneously, an indescribable sensation at the pit of the stomach, feebleness of the limbs, and loss of power over the muscles. These effects, however, were quite transient.

CASE 12.—A hypochondriacal man, aged forty-eight, who had long been tired of life, took two drachms of *ol.-æth.-amygdal.-amar.* at eight o'clock, and went to bed. In a few minutes his face became distorted, his eyes were turned up and fixed, and seemed to be forced out of their sockets; his chest moved spasmodically and rapidly; in twenty minutes he was unconscious, with open and fixed eyes, immoveable irides, rattling in the throat, and progressively slower respiration; his pulse and heart-beats were very slow, only thirty, and scarcely perceptible, he could not swallow, and died in an half hour.

Post-mortem Appearances.—With the temperature down to 40 Fahr. decomposition had progressed very rapidly in thirty hours; the head, body and limbs were very livid, and all the superficial veins distended; the scrotum swollen and blue; from the nose and mouth, as often as the body was moved, there flowed almost purely bloody fluid; the nails were blue.

The stomach and bowels were much reddened and distended; the cardiac and pyloric orifices were more reddened than the rest of the stomach; the inner surface of the stomach and duodenum was considerably reddened and covered with streaks of blood.

The liver was of a steel-grey color and much enlarged; there was dark-blue bile in the gall-bladder; much dark violet-colored blood flowed from the cut surface of the liver. The spleen was of the same color as the liver, and the same kind of blood flowed from the cut surface; it was twice as large as usual; both kidneys contained much blood, similar to that in the liver and spleen; the bladder contained but little turbid urine; both pleural cavities were almost filled with a bloody fluid. The heart was much relaxed and contained thin violet blood.

The substance of the brain was soft; the blood in all the vessels and cavities smelt of bitter almonds; there was a serous effusion on the surface of the pia-mater; the ventricles contained bloody water; and the plexuses were crowded with blood. (4.)

Clinical Remarks.—It is homœopathic to venous congestion and decomposition of the blood. (11.)

In animals, convulsions soon show themselves, and sometimes assume a tetanic character, accompanied by cries and other signs of pain; at the sametime the circulation and respiration are accelerated; but after a short time the signs of prostration replace those of convulsion; the animal can scarcely support itself, and paralysis makes rapid progress; the motions of the heart and lungs subside, a profound calm supervenes and the animal dies without convulsions. (38.)

In man convulsions are said to be less frequent; vomiting often occurs; while colics, diarrhœa and meteorism are common. (38.)

NERVOUS SYSTEM.

Nerves of Sensation.—Its action is supposed to be less decided upon these, than upon the nerves of motion. (11.)

Clinical Remarks.—In prosopalgia ten or fifteen drops of a solution of twenty drops of Ol.-Amygdal.-amar. in three drachms of alcohol has been given with success three or four times a day. (6.)

Nerves of Motion.—It seems to exert a specific action upon these parts; convulsions are not uncommon in the human and animal subject; lock-jaw, tetanus, opisthotonos, and other spasmodic and convulsive attacks have repeatedly been produced by it, see cases 3, 5, 8, 9, 10 and 11. Still these effects are apt to be followed by great relaxation and collapse, very unlike the tetanic rigidity which remains after death from poisoning with Strychnine and Nux-vomica. (11.)

Clinical Remarks.—*Convulsions and epilepsy.* A boy, aged sixteen, who had been epileptic for seven years, could always ward off his attack if he took *Aqua-Amygdal-amar.-concent.* soon enough; but it did not effect a radical cure. (4.)

A young woman, aged twenty-two, in the eighth month of her first pregnancy, suffered frequently with severe headaches, and also had great swelling of the feet, face, arms, and in short, of the whole body. (BRIGHT'S DISEASE). After sitting in the sun a very violent attack of headache came on, attended with blindness, and followed in six hours by general tonic cramps, which lasted fifteen minutes and recurred at short intervals. She was bled and took several doses of Calomel, but the *puerperal convulsions* returned and lasted almost uninterruptedly for three hours; even when they ceased for a few moments consciousness did not return. Every variety of antispasmodic remedy was used without relief, and the dropsical swelling of the face and neck increased so rapidly that speedy death was expected. This state of things lasted for twenty-one hours in all, when *Aq.-Amygdal.-amar.-concent.* was given in twenty drop-doses. The cramp ceased at once after the first dose; the doses were repeated every hour with progressive improvement of the patient; a few drops afterwards sufficed to ward off any threatening of an attack. (4.)

VASCULAR SYSTEM.

Heart and Arteries.—Dr. Gregory experienced a hot fit, or fever; in case 2, there was coldness and relaxation of the limbs, paleness of the face, coldness and whiteness of the lips, nose, ears, arms and legs, while the pulse and respiration were scarcely perceptible, and the heart beat with little energy; in case 9, the face was deadly pale and the pulse imperceptible; in case 10, the pulse was also scarcely perceptible; in case 11, the pulse was full and strong, but slow; in case 12, the pulse and heart-beats were very slow, only thirty, and scarcely perceptible. Hence we have the right to conclude that it is a depressant to the arterial system. (11.)

Venous System.—It has a great tendency to render the blood non-arterial and venous, and to produce great venous congestion. (11.)

Blood.—It renders the blood thin, fluid, and purplish, (see case 12.)

Fever.—*Clinical Remarks.*—Bergius affirms that from 500 to 1000 grammes of an emulsion of bitter almonds given during the interval of the paroxysm, will cure *intermittent fevers*, which will not yield to Quinine. Cullen, Hufeland, Frank, and especially Mylius, have earnestly supported this therapeutic notion. Mylius prefers bitter almonds to all other substitutes for Quinine; he forms an emulsion with six or eight grammes of bitter almonds in 100 or 125 grammes of water, and administers this dose at one time, about an hour before the expected paroxysm; in this way he cured seventeen cases in the course of two months; some required only three doses, others as many as twelve. Frank, who repeated the experiments of Bergius and Mylius, approves of their practice, only he adds to the emulsion four or eight grammes of the extract of lesser centaury. (38.) Frank, Hufeland and Richter have given it successfully against fever and ague (3.), Dierbach recommends adults to take seven or eight bitter almonds, three times during the apyrexia, or three drachms of bitter almonds to three ounces of water, with the addition of the extract of *Centaurium minus*. Frank says the remedy which Hufeland relied upon most in simple fever and ague, was bitter almonds from ʒiiss. to ʒij. , water ʒiij. , to which ʒss. to ʒj. of ext.-centaur.-min. was added. Frank and Wiebel often effected cures with one or two bitter almonds taken just before the paroxysm, which would then stay away entirely, unless other causes requiring different treatment interfered. The powder against fever and ague, which was so highly recommended by Heurnius, consisted of burnt nutmegs, peach pits and bitter almonds each, ʒj. Crato von Kraftheim relieved Abbot Guarnerius of fever and ague with the expressed juice of carrots with sugar, and with a powder composed of five peach-pits, taken in the morning. The use of bitter almonds as an amulet against fever and ague is very common; three bitter almonds are marked with certain Greek or other letters and then taken shortly before the expected paroxysm. (11.)

Skin.—The smallest dose occasionally produces urticaria and other unpleasant symptoms. (44.) On the late Dr. Gregory they caused: first, sickness, generally tremors, then vomiting, next a hot fit, with an eruption of urticaria, particularly on the upper part of the body; at the same time the head and face swelled very much, and there was a general feeling like intoxication. These symptoms lasted only a few hours, and the rash did not alternately appear and disappear, as in common nettlerash. (3.)

Clinical Remarks.—Notwithstanding its great homœopathicity to skin-diseases, the emulsion as often employed in the dominant school as a wash to relieve irritation in various skin-affections, such as herpes, prurigo, acne, impetigo, &c. (3.) In acne rosacea, and impetigo, the emulsion as a local-application has been successfully employed by Dr. A. T. Thompson; he states that he found it extremely beneficial. In lichen tropicus, or prickly heat, Dr. Houghton

advises almond-emulsion to which a few bitter almonds have been added, when the itching is very distressing. (44.) Against obstinate herpes pressed bitter almonds (*Phyllis-amara*) has been given in doses of five or six grains three times a day; as a wash, an emulsion of bitter almonds has been used against excessive itching of the skin and porrigo, also against freckles and chloasma, or liver-spots. Dioscorides recommended them against herpes and ill-conditioned ulcers. (6.)

Head.—Feeling of intoxication. In Case 1, there was giddiness, loss of consciousness and recollection, and complete insensibility; in Case 2, there was unconsciousness, although the jaws were so tightly closed that they could scarcely be opened; he paid no attention to loud talking, but vomited when shaken; in Case 3, the head was only confused; Case 4 was unconscious, speechless and almost motionless; Case 5 was stupefied and convulsed; Case 7 became immediately insensible, but had no spasms, the limbs very relaxed, but the jaws firmly closed; Case 8 had giddiness, lock-jaw, general convulsions and insensibility; Case 9 fell down in a state of syncope, followed by delirium and slight convulsions, succeeded by transient consciousness and alternating delirium; Case 10 fell down insensible and convulsed; Case 11 fell insensible and convulsed with flushed face and dilated pupils. Case 12 was unconscious. (11.)

PATHOLOGY.—Substance of the brain soft; serous effusion under the arachnoid; ventricles filled with bloody serum, and blood-vessels and plexuses crowded with blood.

Clinical Remarks.—It is homœopathic to venous congestion of the brain, especially when the white or motor portions are also irritated so as to cause convulsions, or lock-jaw. (11.)

A young lady was attacked with violent hepatitis in consequence of suppression of menstruation from taking cold; on the 6th day she was suddenly seized with delirium, singing, picking at the bed-clothes, &c.; two doses of *Aqua-Amygdal-amar.*, twelve drops each, at intervals of half an hour, dispersed these threatening signs of phrenitis. (4.) According to Dioscorides, five or six bitter almonds will suffice to dissipate drunkenness. Plutarch records that the son of the physician of the emperor Tiberius was able to keep pace with the most intrepid toppers, by taking the precaution to eat several bitter almonds; while Lorry and Gregory experienced a feeling of intoxication from eating a few, or ten or twelve. Trousseau and Pidoux remark that these facts, if true, do not impeach the correctness of Dioscorides' remarks, for Ammonium which produces a kind of intoxication, will dissipate the vapors of wine in a number of persons. (38.) It is most homœopathic to venous congestion of the head, with tendency to serous effusion, and softening of the brain. (11.)

Stomach.—*Clinical Remarks.*—A robust and plethoric woman, aged forty, who committed frequent errors in diet, and often took cold, was attacked with violent cramps in the stomach and other gastric derange-

ments. Counter-irritant, resolvent, and diaphoretic remedies and emetics, all failed to afford relief, for the pain and cramps in the stomach recurred after every meal, until she was almost reduced to a skeleton. She then took three, and finally five bitter almonds every morning and evening, for half a year, when she was entirely cured. (4.)

Bitter almonds have been recommended in the dominant practice as an excellent vehicle for various remedies, and as a substitute for the Hydrocyanic-acid in many stomach-affections depending upon an irritable condition of that viscus, when that remedy is indicated.

Liver and Spleen.—It seems to exert a special action upon these organs, and is homœopathic to enlargement, engorgement and venous congestion of these organs. (11.)

Clinical Remarks.—Aetius gave it against abdominal-infarctions, and obstructions in the liver and spleen. This practice has been revived in latter times by Thillenius. (6.)

Genital Organs.—*Clinical Remarks.*—A woman, aged thirty-seven, subject to cramps in the stomach, but otherwise strong and blooming, was attacked suddenly at night, in the thirtieth week of her ninth pregnancy, with violent *labor-like pains*; she feared an abortion, was much excited, greatly heated and red in the face; complained of nausea, thirst, bad taste in the mouth, lassitude, and had a hot, dry skin, with a small spasmodic pulse. She took Aq.-Amygdal.-amar. every hour in twenty to thirty drop doses; when she had taken ʒij., the labor-pains ceased, but she was left with considerable stupefaction and dizziness. She was safely delivered at the full time of a healthy child, but was soon attacked with such violent after-pains that she was forced to cry out aloud. The water of bitter almonds again relieved her quickly. (4). Pitschaft recommends bitter almond-water to relieve painful menstruation. (3.)

Chest.—*Clinical Remarks.*—Dioscorides used it against spitting of blood; against inflammation of the lungs and kidneys. Aetius gave it more especially to promote expectoration, when the lungs were supposed to be filled with tough viscid mucus. In pneumonia Are-tæus used a decoction of barley, in which bitter almonds had been infused, as a valuable remedy against difficulty of breathing; Celsus used an infusion of bitter almonds to relieve cough. Antonius Mu-sæ used it generally against suppurations of internal parts. (6.)

AMYGDALA-DULCIS.

SWEET-ALMOND.

AUTHORITIES.

Pereira's Mat. Med. (3.) Waring's Therap. (44.)

GENERAL REMARKS.

Three varieties of the sweet-almond are known, of which the finest (the Jordan-almond) comes from Malaga. Other varieties of greater or less value are the Valentia, Barbary and Italian almonds. They are all odorless, and have a bland, sweetish taste. They have very slight medical properties. (3.)

Throat.—*Clinical Remarks.*—The emulsion is said, freely administered to have the property of allaying cough: and to be frequently very serviceable in pulmonary affections to allay irritation and appease the cough.

Stomach.—*Clinical Remarks.*—In *cardialgia* or heart-burn, Dr. Duncan states that peeled sweet almonds, six or eight at a time, sometimes give immediate relief. (44.)

Abdomen.—*Clinical Remarks.*—Almond-emulsion is often exceedingly serviceable in inflammatory conditions of the alimentary canal, shielding the inflamed surfaces from noxious substances, and allaying the irritation.

Almond-oil, in large doses acts as a mild laxative.

Skin.—*Clinical Remarks.*—In *acne rosacea* and *impetigo* the emulsion, as a local application, has been successfully employed by Dr. A. T. Thompson; he states that he has found it extremely beneficial. (44.)

In *lichen tropicus* or *prickly heat* Dr. Houghton advises its use, combined also with a few bitter almonds. The skin should be moistened with it twice or thrice daily, or when the itching is very distressing. (44.)

ANACARDIUM-ORIENTALE.

MALACCA-BEAN.—CASHEW-NUT.

AUTHORITIES.

Noack and Trinks. (19.) Jahr. (32.) Peters. (11.) Flora Homœopathica. (50.) Strong's American Flora. (49.) Frank's Magazine. (4.)

GENERAL REMARKS.

The name is derived from two Greek words, *ana*, without—and *kardia*, a heart: because the pulp of the fruit, instead of having the seed enclosed, has the nut growing out at the end of it. Hahnemann in his account of this medicine (Chronic Diseases: Art. Anacardium.) Confounds Avicenna- with Semecarpus-Anacardium; the two trees belong in fact to different natural orders, one to the *Personatæ*, and the other to the *Terebintaceæ*, the nut of the Avicenna or Malacca-bean, being kidney-shaped, while that of the Semecarpus is heart-shaped. (50.)

As the nut mentioned by Hahnemann is without doubt the fruit of the Semecarpus, and not of the Avicenna- or Malacca-bean,—by which name it is erroneously described in Gruhner's Pharm. and Mat. Med., but correctly in Dr. Quin's Pharm. Hom.—a description of the three is subjoined, viz., the nut described by Hahnemann, the Semecarpus and the Avicenna, by which it will be seen that Hahnemann's nut agrees with the former and not with the Avicenna. (50.)

HAHNEMANN.	SEMECARPUS.	AVICENNA-TORMENTOSA.
Found in the forests of the East-Indies; — between the external black, shining, heart-shaped, hard-shell and the sweet-kernel, which is covered with a brown-reddish thin skin, there is a thick blackish juice contained in a cellular tissue, with which the Indians mark their linen in an indelible manner. In the fruit which we receive here, this juice which is commonly of the consistence of honey, is generally found dry.	Marking-nut tree. Pentandria, Trigynia, Nat.-order, Terebintaceæ. Nut black, containing a corrosive resinous juice, at first of a pale milk-color, but turning black. Found in the mountainous dry forests of the East-Indies. The seed is ripe in January and February.	Malacca bean. Didynamia Gymnospermia. Personatæ. Capsule coriaceous, rhomboidal, compressed, one-celled, two-valved. Seed, one large, form of capsule, constructed of four fleshy folds; germinating in low lands along the coast of Malacca in the Indian Archipelago.

The Indians after depriving the nut of its external rind and juice roast and eat it with much relish.

The fruit of this tree is full of an acrid-juice and in taste and appearance resembles that of the common lemon; to the apex of the

ruit grows a kidney-shaped nut, much larger at the end which is next the fruit than at the other, consisting of two shells, with a black juice between them.

TOXICOLOGICAL EFFECTS.

According to Dr. Städeler there is found in the cellular interspaces of the fruit of the *Anacardium-orientale*, a balsam-like fluid, which has been used externally by V. de Mattes as a *vesicant*, and internally as a *drastic* remedy. This balsam consists of a fatty acid called *Anacardic-acid*, and a chemically indifferent substance called *Cardol*. This latter, i. e. *Cardol*, is an oleaginous fluid, which when rubbed upon the skin, causes an acute sensation of burning in from three to seven minutes, followed by a whitish spot, which changes in six or eight hours into a vesicle filled with a whitish fluid, and which continues to suppurate for ten or fourteen days.

Professor Frerichs has frequently used the ethereal extract of *Cardol*, which is a dark-brownish oily liquid, as a blistering remedy. If it be painted with a small camel's-hair brush upon the sound skin, it dries in rapidly, and excites a slight burning and itching in a few minutes, gradually followed by redness and swelling. In the course of twelve hours, the epidermis rises in the form of wheals (*urticaria tuberosa*), which gradually change into flat, confluent vesicles, or *bullæ*. (4.)

The first, or wheal-like prominences of the epidermis, are firm and solid protuberances, like those of *tuberous nettlerash*. In the course of time this first or solid exudation is saturated and softened by an effusion of serum and breaks down into a sero-purulent fluid, which converts the wheals into white sero-purulent vesicles, which at first are not larger than a pea and remain flat, but which soon coalesce and form large flat *bullæ*, which open and discharge a turbid, purulent fluid. In the course of a few days the epidermis over the *bullæ* falls completely off, leaves the exposed cutis swollen and congested, and profuse suppuration persists for ten or twelve days more, provided the blistered part be not exposed to external irritation, or to motion or friction; then the part skins over, and a brownish-red spot remains for some time. But if the sore spot be rubbed and scrubbed, or be exposed to much motion or friction it will of course not heal so soon; on the contrary, fresh exudations take place on the edges of the ulcer, and pass through the same metamorphoses as the original disorder; under peculiarly unfavorable circumstances the circumference of the vesication will become very much reddened and swollen. (4.)

The peculiar advantages of vesication with *Cardol* are supposed to be its cheapness, for with two drachms upwards of one hundred persons may be blistered, but more especially and peculiarly that the irritation of *Cardol* causes an effusion of plastic lymph from the capillaries of the cutis, and that this exudation of plastic lymph is not a transient, but a long-continued one, and hence is a new and very useful form of counter-irritation.

Cantharides causes a marked effusion of serum; Tartar-emetica tends to cause a purulent exudation, and Anacardium an outpouring of plastic lymph. (4.)

Clinical Remarks.—Anacardium is a rival of Rhus and Cantharides in eruptive disorders; it is more homœopathic than these to *tuberous nettle-rash*. The natives of India are said to use Anacardium against the bites of snakes and scorpions; at first they take only a small quantity of the fresh nut, but gradually increase until they consume a whole nut. (11.)

CASE 1.—The worst case of external poisoning which has ever come under our notice, was produced in a lady who was exposed to the fumes of the nut while roasting. The face was so much swollen that for some time not a feature was discernible. The kernel when fresh has a sweet agreeable taste, and is eaten like chestnuts either raw or roasted. By age it loses its agreeable flavor and becomes rancid. (49.)

Clinical Remarks.—This remedy deserves attention in erysipelas of the head and face, especially when the brain threatens to become affected, and more or less stupor or tendency to dullness of mind and forgetfulness is present. (11.)

CASE 2.—A man wore a Malacca-nut upon his breast to cure rheumatism; in the course of eight days he was attacked with itching upon the chest, and eruption of wheals upon the abdomen and in the arm-pits, attended with fever and loss of sleep at night. The wheals changed to bullæ, and secreted a yellowish fluid; *wartlike* excrescences were also formed, with thickening of the epidermis, inflammation of the intermediate skin, and formation of yellow crusts.

Clinical Remarks.—This case proves the homœopathicity of Anacardium to excessive itching and perhaps prurigo; to wheals, or urticaria-tuberosa, which is simply an effusion of serum and a small quantity of plastic lymph in the cutis-vera; it may also prove homœopathic to lichen-urticatus, and to erythema-nodosum. It may also be used homœopathically against the bullous cutaneous diseases, such as pemphigus, rupia. It has a popular reputation against warts, yet this case proves that it is homœopathic to them. In short, it must be admitted as a great homœopathic rival to Rhus, Cantharides, Euphorbium and Urtica-urens in many erysipelatous, bullous and vesicular skin-diseases. (11.)

CASE 3.—Reil rubbed Anacardium on a small spot on the back of his hand; during the first six days after, there was some itching and the skin became somewhat elevated; during the next three days the skin peeled off in small white patches, leaving sore, uneven and shining spots, upon which minute herpetic-like pustules arose, with much itching at night, and discharge of a fluid, which soon hardened into scabs. The inflammation of these parts increased for several days more, an eruption of wheals broke out over the whole of the back of the hand, with swelling extending up to the fore-arm, followed by a bran-like desquamation.

Clinical Remarks.—The phenomena of this case seem to point to its homœopathicity to scaly eruptions and to eczema-impetiginodes, as well as to urticaria and perhaps phlegmonous-erysipelas. (11.)

CASE 4.—An assistant in Gurner's homœopathic pharmacy in Dresden, attempted to powder fresh and juicy Malacca-nuts in a mortar; a little of the juice spirted into his face, followed in several hours by violent burning and itching, and an eruption of small vesicles which poured out a fluid when scratched. During the night his face swelled considerably, and in the morning it was covered with a number of pock-like vesicles; there was violent burning in all the swollen parts. By the second night the swelling of the face had not only increased, but similar vesicles had appeared on the backs of both hands, attended with similar burning pains. The vesicles on the face broke during the next day and exuded a yellowish transparent fluid, which soon hardened into a yellowish transparent mass; the burning was aggravated every evening, up to the fourth night, when an extremely painful itching attended with acute pricking and biting, as if from insects, disturbed his sleep; to this was added violent rending pains in the teeth on the left side, which recurred again on the next day. The swelling and the other unpleasant accompaniments gradually subsided, so that at the end of fourteen days there was only some troublesome itching at night in bed.

Clinical Remarks.—This case points to the homœopathicity of *Anacardium* to eczema-impetiginodes, to varioloid and small-pox, to erysipelas, especially when attended with excessive burning, itching, pricking and biting pains; also to prurigo, and to neuralgia about the face and teeth, when arising from a concealed or suppressed erysipelatos or other cutaneous affection. (11.)

CASE 5.—A missionary rubbed some of the juice in the palm of his hand; the skin became black and could not be washed clean; in a few hours his eye-lids began to swell, and the swelling extended gradually over the whole of his face, head and neck, attended with such violent itching that he scratched himself sore. A salve of milk and oil produced no relief, but the juice of green indigo-leaves afforded much comfort. After the swelling subsided, the entire skin of his face and neck peeled off, without further unpleasant consequences.

Clinical Remarks.—This case proves the homœopathicity of *Anacardium* to erysipelas of the head and face, and to the desquamative stage of severe cases of scarlet fever. (11.)

General Clinical Remarks.—Dr. Weber of Hanover, recommends it in cases in which after inflammatory diseases the corporeal powers have been completely restored, but the mind has failed to regain its former strength. It is not merely in recent and manageable cases, but in chronic and intractable ones that *Anacardium* proves useful. It often happens after inflammatory fevers, after typhus and many cerebral affections that the capability for any mental application is lost for a long time, for weeks and months; but the majority of these

cases may be cured by suitable recreation, cold ablutions, abundant exercise in the open air, travelling, &c.; in this way, the former health may not only be restored, but a freshness, elasticity and power of mind may be attained in a higher degree than was enjoyed before. Anacardium is not only useful in these cases, but also in those instances in which all these means have failed, and the patient for a lengthened period after recovery from acute disease has not regained his intellectual powers, although his physical force may be entirely restored.

CASE 1.—A lad, aged eighteen, after an attack of small-pox, regained his usual bodily strength, but became “silly;” his memory was deficient, reflective powers weak, and self-possession limited. Eighteen months passed by without any indication of improvement in his mental powers. He then took Anacard.-orient. 1st dilution, eight drops in water, every night; in fourteen days he was vastly improved; he was quite rejoiced at the change in his head, as he expressed it; Weber saw the patient frequently afterwards and repeatedly satisfied himself as to his mental powers, as well as to his goodness of memory.

CASE 2.—A young and powerful man, aged twenty-two, evinced great dullness of manner after recovery from typhus; his memory became quite enfeebled; he was constantly in the habit of forgetting commissions which he had to execute, suffered much ill-treatment in consequence, and finally was no longer employed or trusted; hence he became surly, angry and ill-tempered in his behavior. After he had been in this state for more than a year, he took Anacardium 1st, as above; and was almost well in three weeks. Zincum also deserves attention in these cases.

The Anacardium or Malacca-bean was used by the early Arabians in mental diseases, especially in loss of memory. Serapeon in his book *de Simplicibus*, quotes most of those Arabian authors who have written on the use of Anacardium-juice. Aben Mesuai says: *Est bonus corruptioni sensus et memoriæ*. Alcalahamen: *Proprietas ejus est, conferre relaxtioni nervorum (paralysis)*. Bedigoras: *Removet oblivionem, et acuit sensum*.

CASE 3.—A delicate lady, aged seventy, was afflicted with ulcers on the feet, and frequently with such violent attacks of vertigo, that she often fell unexpectedly from her seat. For several days a striking falling-off in her memory had been observed, followed by an imperfect palsy of the voluntary muscles; whilst drinking, the cup would fall out of her hand, the fluid ran out of her mouth, and she only swallowed the liquid when a spoon was put in her mouth and allowed to remain; her head was apt to fall upon her breast, so that she could only hold it up with difficulty; her features were distorted, her look wild, and her expression childish; she did not know those around her, was unable to speak, and only made unintelligible sounds. She stood up with difficulty, and when urged to move forward she could not move a foot, but sank back into her seat in a most childish manner.

Her breathing was free; skin rather cool than warm; pulse slow, moderately full and 60 per minute.

She took *Anacardium*, 1st dilution, internally in drop-doses; she fell asleep, perspired profusely, and awoke in five hours; had no recollection of what had occurred, and could swallow with facility. She recovered perfectly in a few days; a slight relapse eight months after was also quickly relieved by *Anacardium*.

CASE 4.—A delicate lady, aged seventy, was attacked with a severe eruption upon the face and chest, which was supposed to arise from poisoning with the ivy-vine; some little time after this eruption had disappeared she was seized with such extraordinary forgetfulness and absent-mindedness that serious disease of the brain or an attack of apoplexy was feared. A few drops of *Anacardium-tinct.* in a wine-glassful of water, one or two teaspoonsful per dose, quickly relieved all threatening symptoms. (11.)

ON THE NERVOUS SYSTEM.

Nerves of Sensation.—It does not seem to produce pain apart from inflammatory irritation, and hence seems to act far more decidedly, and as a powerful irritant to the vascular, rather than to the nervous system. (11.)

Clinical Remarks.—It may prove useful in some inflammatory neuralgias, especially in erysipelatous subjects. (11.)

Nerves of Motion.—It seems to act even less upon the nerves of motion than upon those of sensation. (11.)

Clinical Remarks.—It probably will prove as useful in rheumatism, paralysis and convulsions from suppression of eruptive diseases as *Rhus* is well known to do. (11.)

Ganglionic Nervous System.—Its predominant action upon the vascular system may lead us to infer that it acts specifically upon the great sympathetic nerve which presides so peculiarly over the circulatory, nutritive, se- and excretory operations of the system, and to assume that those cerebral affections which are so beautifully relieved by *Anacardium* arise from a sympathetic disorder of those portions of the great sympathetic nerve which are within the cranium. (11.)

ON THE VASCULAR SYSTEM.

Blood.—Its peculiar action upon the blood is unknown; but it may be inferred that it tends to produce an action upon this fluid opposite to that of the narcotics, which depress the arterial side and intensify its venous tendencies; and similar to that of the irritant and phlogistic remedies, which excite inflammation and its consequences, such as heat, redness, swelling, pain, effusion of serum, sero-fibrin, and seropus. (11.)

Hæmorrhages.—If it is homœopathic to any hæmorrhages it is to

active and arterial hæmorrhage, arising from inflammatory irritation and congestion. (11.)

Heart and Arteries.—Anacardium, if taken in full doses internally, would doubtless exert as powerful action upon all the parts with which it comes in contact, as it does upon the skin. (11.)

Clinical Remarks.—INFLAMMATION: It must be regarded as a remedy of great power in many *intense inflammatory diseases*, especially of an erysipelatous character, and should often be kept in mind when Rhus, Euphorbium and Cantharides seem indicated. (11.)

Fever.—Long-lasting shivering and tremor, early in the morning, with want of appetite. Chilliness over the whole body, with heat of the face. Feverish restlessness, with tremor of the limbs and feeling of prostration. Great heat of the body, with thirst, perspiration, hot breath, with shaking of the body on account of internal chilliness. Internal heat, with general cool sweat, especially about the head, with thirst, malaise, especially in abdomen and knees. Profuse sweat at night. (19.) Horripilation over the whole back, as from cold water being thrown upon him. Heat of the skin, with great thirst and dry parched lips. Great heat, especially in the night, with vehement thirst, without sweat. (32.)

Clinical Remarks.—It is much less homœopathic to pure fevers than to inflammatory fevers, and to erysipelatous and suppurative inflammations. (11.)

Venous System.—It is not supposed to exert any direct action upon this system, although some authors regard all erysipelatous inflammations as venous rather than arterial phlogoses. (11.)

Lymphatic and Glandular System.—It does not seem to act specifically upon the lymphatics and glands, although it, doubtless, is often homœopathic to affections of these organs, which arise from the absorption of erysipelatous, eczematous or other cutaneous matter. (11.)

ON THE TISSUES.

Mucous Tissues.—It is not evident whether Anacardium exerts any specific or peculiar action upon the mucous tissues, apart from its general irritant, and vesicant action. (11.)

Serous Tissues.—From its marked action in producing serous effusions it might be supposed that it exerts a more specific action upon the serous, than upon the mucous or fibrous tissues; but we have no positive proof to this effect. (11.)

Fibrous Tissues.—We have no positive proof that it influences the fibrous tissues in a specific manner; it is possible that it may be suited to many pains and other disorders of the fibrous tissues, arising from the suppression or non-development of some eczematous, urticarious or erysipelatous disorder. (11.)

Dermoid Tissue.—According to present appearances this seems

to be the great centre of its action; unlike Cantharides, which it otherwise much resembles in its action, it does not act specifically upon the kidneys or any other important organ, except perhaps the brain; unlike Rhus, whose action upon the skin it closely imitates, it appears to act far more specifically upon the brain, than upon the motor nerves and muscles; at least Anacardium cures some brain-affections quite as rapidly as Rhus cures some cases of paralysis arising from suppression or non-development of eruptive disorders. (11.)

Skin.—The skin of the body is insensible to itching stimuli. General voluptuous itching over the whole body, which spreads by scratching. Heat in the skin of the whole body, when in bed with burning-itching and irritation of the skin, such as arises from much scratching; after the scratching the burning increases. (19. 32.)

Clinical Remarks.—Anacardium is homœopathic to many most important skin diseases, viz., to urticaria-tuberosa or tuberous nettlerash; it may be used in varioloid and small-pox, also in bullous and phlegmonous erysipelas, and in scarlet fever, especially in the severe and malignant forms and in the desquamative stage; in rupia and ecthyma it deserves attention; in chronic and obstinate forms of itch; in some severe or even malignant ulcerations, such as lupus, some syphilitic ulcerations, and even in ulcerous cancer. Its important relation to severe cutaneous affections has never before been pointed out. Jahr and his copyists and translators do not seem to have the faintest idea of the importance of this drug in cutaneous affections. (11.)

The juice which is in the cells under the rind of the nut, is of such acridity that it is used by the natives to burn off warts, condylomata, and other excrescences, and to keep down excessive granulations in ulcers, both in men and animals.

Cellular Tissues.—It is a question whether Anacardium does not act more specifically upon the cellular tissue than upon the skin proper; all its external manifestations seem to point to its proclivity to extend its operation to the sub-cutaneous cellular tissue—more so than Cantharides and Rhus, whose actions it otherwise mimics in a marked degree. (11.)

Mind and Disposition.—Weakness of memory, memory very obtuse. Forgetfulness. Great timidity. Great indifference. Uneasiness. Depression. Misanthropic. Irritable, sensitive, contradictory. Timidity in all his actions. Want of courage, with stupid behavior. Madness. (19.) Apprehensiveness without cause. He laughs when he ought to be serious. (32.) Weakness of mind, memory, and senses. Imbecility. Loquacious dementia. Melancholia in all its forms.

Clinical Remarks.—The ancient writers recommended it chiefly in mental diseases, particularly in loss of memory, paralysis and spasms;

and the Arabian physicians speak of it in the same affections, and also as a prophylactic in those disposed to paralysis.

The Confectio-Anacardium became celebrated under the name Confectio-Sapientium, as a remedy against weakness of the mind; but Hoffman called it Confectio-Stultorum, and condemns the internal use of it, as he says that people have been made mad by it, and lost their memory, and died miserably on account of using it too often. Hence the abuse of this drug made it hurtful: applied homœopathically for the same diseases, it becomes a powerful and efficient remedy.

Sensorium.—Every kind of intellectual labor is difficult for him. Dullness of sense, accompanied by dullness of the head and prostration of strength. Any little effort of the mind causes a sensation in the brain as if bruised; mental illusions. He imagines he hears his name called by his distant mother and sister, attended with anxiety and fear of impending misfortune (*presentiment*.) Melancholic illusions; he imagines he sees a coffin in a side-room upon which either his friend or himself is lying. (32.)

Clinical Remarks.—Anacardium is homœopathic to torpor of the brain, when arising from excessive intellectual labor, or remaining after fevers, especially erysipelas, or other eruptive fevers, or typhus, or intermittent. (11.)

A case of hallucination in a dyspeptic, aged thirty years, is reported by Dr. Gerson, who relieved the dyspepsia by Puls., Ignat., Acid-nitr., Sulph. and Sepia, but there remained a fixed idea with the patient, that a demon was pursuing him. In fact he thought it seated on the back of his neck, possessed with a double voice, which troubled him everywhere—this morbid condition was completely removed in six weeks by *Anacardium* 2d, night and morning a dose. (26.)

Sleep.—Great drowsiness and dullness, especially in the afternoon. Twitching of the mouth and fingers during sleep. Sudden, frightful starting in bed just before going to sleep. Uneasy sleep and constant tossing about, on account of dull unbearable pain in the head. Very sound sleep. Constant confused sleep, without dreams, with great heat, red cheeks, cold forehead, great thirst, feeling of soreness and dryness in throat. Vivid frightful dreams. (19.) Vivid dreams, accompanied by great mental exertions, causing a headache as from bruises, which he feels even on waking. Anxious dreams, full of danger; he screams anxiously when asleep. (32.)

Clinical Remarks.—It may prove useful against the restlessness, sleeplessness and cerebral pains and illusions which precede the outbreak of some eruptive disorders, such as scarlatina, variola and erysipelas. (11.)

Head.—Vertigo on stooping, every thing turning black before the eyes. Headache, with a feeling of tightness and vertigo, worse on motion. Painful, stupid feeling through the whole of the head. Weight and pressure in the brain, especially towards the forehead. Violent tearing pressure and sharp jerking pain in the temples. (19.) Early

in the morning, after rising, his head feels so dull and heavy that he is scarcely able to carry it; he is obliged to lie down again, his head feels very heavy the whole day. Vertigo as if the objects or himself were wavering; he is obliged to hold on to something. Pressure in the head. Violent pressure in the region of the right temples. Pressure from without inwards. Compression and dull pressure. (32.)

Clinical Remarks.—It is homœopathic to headaches arising from great debility and weakness of the brain, also from congestion, after the subsidence of severe eruptive or inflammatory diseases; also to the irritative headaches which precede eruptive disorders, or occur in consequence of the suppression of acute eczema, erysipelas, &c. (11.)

Eyes.—Violent pressure in the eye-ball. Deceptive sight. Photophobia. Weakness of the eyes and obscuration of sight. (19.) Luminous vibrations before the eyes. Contraction of the pupils. Short-sightedness. *Muscæ volitantes*. (32.)

Clinical Remarks.—It has been used successfully against great weakness of sight, and commencing amaurosis; it has also been said to have partially removed shortness of sight. It may cure some eye-affections arising from the non-development of eruptive disorders, or those which follow herpetic eruptions about the lids, or from measles or erysipelas. (11.)

Ears.—Pain in the ears as though there was an ulcer forming; worse on moving the jaws. Itching in the ear, with a discharge of brownish matter. Obstruction of the ears, and hardness of hearing. (19.) Cramp-like pain in various parts of the ear. Roaring before the ear; humming in the ears. (32.) Painful swelling of the external ear; hearing weak at times, unusually acute at others. Chronic deafness.

Clinical Remarks.—It is homœopathic to eruptive affections of the internal ear; to chronic eczema extending deep into the meatus, attended with more or less pain, redness, swelling, discharge and consequent deafness. To chronic deafness from a chronic erysipelalous or eczematous affection of the ear. It has also been recommended in difficulty of hearing and deafness from a debilitated or paralytic state of the auditory nerve, especially after the occurrence of some grave fever, or eruptive disorder. (11.)

Nose.—Bleeding at the nose. Sense of smell diminished. (19.) Chronic coryza; and blenorrhœa from the nose. (32.) Frequent sneezing, followed by the most violent flowing catarrh, with lachrymation. Distressing coryza, with catarrhal fever, icy coldness of the hands and feet, loss of smell, pains and cramps in limbs, feverish restlessness, &c. Dullness of the head, such as occurs in catarrhs. (11.)

Clinical Remarks.—It is homœopathic to catarrh of the nose, arising from a chronic eczematous or erysipelalous affection of the nares; also to the catarrhal affections of the nose, which arise in literary men

from congestion to the head and nose. It deserves more attention than it has received in catarrhal fevers and influenzas. (11.)

Face.—Paleness of the face. He looks worn out, hollow-eyed, with a blue border around the eyes. Dry heat of the face, with a feeling of tightness of the head, and pale face. (19.) Sickly, wan complexion. White scaly herpes on the right cheek, itching of the forehead; hard, red pustules on the forehead and in the corner of the left wing of the nose, with a feeling of soreness, for several weeks, dryness, burning of the lips. (32.)

Clinical Remarks.—It is homœopathic to vesicular erysipelas of the head and face (see page 339) and ought to be used in this affection quite as frequently as Rhus and Cantharides. It also deserves attention in crusta-lactea, eczema of the face, scald-head, and other eruptive affections. Jahr is unusually deficient in his pathogenesis of Anacardium, as far as refers to erysipelas and other eruptive affections about the head and face. (11.)

Jaws and Teeth.—Cramp-like traction in the lower row of teeth of the right side, reaching up to the ear, returning every evening, for several days. (19.)

Clinical Remarks.—It deserves attention in some neuralgias of the face and teeth, which arise from the irritation of some eruptive or psoric disorder. (See page 340) (11.)

Mouth, Pharynx and Œsophagus.—Fetid odor from the mouth. Painful vesicles in the mouth. Tongue rough and coated with white fur. Scraping, rawness of the throat. (19.) Heaviness of the tongue, pressure in the throat-pit. (32.)

Clinical Remarks.—It has been used against paralysis of the tongue; it is homœopathic to some inflammatory affections of the mouth and throat, especially when of an erysipelatous character. (11.)

Appetite, Taste and Gastric Symptoms.—Want of appetite, weak digestion, increased thirst, foul taste. Pressure and feeling of tightness in epigastrium, stomach and abdomen; nausea and inclination for stool, with malaise and irresistible desire to sleep. (19.) Bitter, dryness in the mouth and throat, insipid putrid taste of the food. Constant thirst, his breath is arrested when drinking. Capricious appetite. Pressure at the stomach, with a feeling of extreme exhaustion and physical prostration, with great thirst, also as if he had eaten too much, with distention of the abdomen; shifting of flatulence in the abdomen; hypochondriac dejection; burning eructation after meals and drinks, also in the morning. Nausea, early in the morning, with sensation in the stomach as of fasting, nausea with retching. (32.) Weakness of digestion and flatulence of hypochondriacs.

Clinical Remarks.—It is homœopathic to some of the forms of indigestion and hypochondria, which so often occur in highly intellectual persons; also to indigestion arising from the retrocession of some eruptive disorders, especially nettlerash, eczema and erysi-
pe-

las; and more especially to flatulence, heartburn, chronic pharyngitis, and canker-sore-mouth, when attended with great hypochondriacal depression of spirits, mental illusions, absent-mindedness, excessive forgetfulness, &c. (11.)

Stool.—Frequent urging to stool; difficult expulsion of soft stool, on account of torpid action of the lower bowels and rectum; griping pain during stool; yawning and eructations after the same. (19.) Constant urging, with tardy expulsion, painful twisting and turning in the intestines. (32.)

Clinical Remarks.—It is said to be most homœopathic to constipation, when arising from torpor of the liver, when there is aching in the region of the liver, light-colored stools, bitter taste in the mouth, tendency to acne, or erysipelatous and erythematous duskiness about the nose and chin. (11.) It is used by the natives in obstinate cases of diarrhœa. It is also useful when there is frequent urging to stool, during the day, for many days, without being able to expel anything, from torpor or paralysis of the rectum. It has removed troublesome chronic itching of the anus, and the varices of the rectum have become smaller and ceased to be painful under its use, except some soreness when one begins to walk. (32.)

Urinary Organs.—Frequent desire to urinate; but little passing off. (32.)

Clinical Remarks.—Wood and Bache say, the receptacle is a reddish-yellow, and of an agreeable sub-acid flavor, with some astringency. It is edible, and affords a juice, which has been recommended as a remedy in dropsy. The natives of the Island make use of it also in *obstinate cases of diabetes*.

Sexual Organs.—Want of excitability of the sexual desire. Discharge of prostatic fluid, with difficult or easy stool; also after the emission of urine. (32.)

Clinical Remarks.—It is homœopathic to persistent voluptuous itching about the scrotum; to leucorrhœa, with itching and soreness; and to the excessive sexual desire which attends these disorders; to involuntary emissions of semen at night, without lewd dreams, and seminal emissions at stool, and after urinating; and when the urine is turbid when emitted, and afterwards deposits a dirty sediment, which looks like clay when shaken. 32.)

Larynx and Trachea.—Night cough, with scraping in the throat, racking cough, like hooping-cough, especially at night, and after speaking. Short cough, with expectoration of matter. Cough, with bloody expectoration, rattling of mucus. Roughness of the throat. (19. 32.)

Clinical Remarks.—It deserves more attention in hooping-cough than it has received, especially when the cough is wearing and attended with vomiting of food, so violent as to force the blood to the head and eyes, most severe at night and attended with the rattling of much mucus in the air tubes. It is a little singular that its allied

remedy Cantharides has a wide-spread old-school reputation against hooping-cough. (11.)

Chest.—Short breath; oppression and huskiness in the region of the sternum. Asthma, dyspnœa, with weeping, which relieves the oppression. Dull pressure, as from a plug in the right side of the chest. Feeling of soreness and rawness in the chest, increased by inspiration. Tearing, with a little pressure on the left side of the chest, reaching up to the heart, as though the whole side should be torn to pieces, especially, when stooping. Single lancinations in the chest. Pulsative lancination in the chest, about the heart. (19. 32.)

Clinical Remarks.—According to the testimony of Garcias ab Horto, the East Indians make frequent use of it in asthma; it is most homœopathic to the asthmas which occur in persons subject to salt-rheum, eczema, or chronic erysipelas or nettle-rash. (11.)

The East Indians gave the kernel, steeped in whey, to those suffering from asthma.

Back.—Stiffness of the muscles of the neck. Pinching, pressing, tearing, sticking pain in the back and between the scapulæ. (19.) Cracking in the scapulæ and cervical vertebræ. Rheumatic drawing along the neck; hard pressure on both sides of the larynx, which sometimes interferes with deglutition. Intermittent prickings, with throbbing, on the left side of the chest, close to the neck. (32.)

Superior Extremities.—Weakness and contractive pain in the arms. Tremor of the arms and hands. Pressure in the arm-muscles and bones, with tired feeling in the same. Tearing and drawing, with a feeling of stiffness in the arm. Crampy jerks and pressure in the bones of the hands and fingers. Hot, dry hands; numbness of the fingers. (19.) Beats, as with a heavy body, intensely painful, in the centre of the left upper arm. Pimples, with red areolæ, and pus at the tip, on the inferior portion of the upper arm, with painful itching during motion. Cramp-like, violent pain in the forearm, elbow, hands, fingers and muscles. Crampy or pulsative twitches in the fingers of the left hand. (32.)

Clinical Remarks.—It is homœopathic to some varieties of pains which occur in the arms from the suppression of eruptive disorders, such as salt-rheum. (11.)

Inferior Extremities.—Drawing and uneasiness in the lower extremities, with a feeling of stiffness. Dull pressure in the thighs, sometimes intermitting regularly, as beats in music; cramp-like pressure in various parts of the lower extremities. Burning in the soles of the feet when sitting. The feet, which had been warm, become intensely cold when walking. (19. 32.)

ALETRIS-FARINOSA.

STAR-GRASS.

GENERAL REMARKS.

It is a native of this country, and is found growing in almost all parts of the United States, in fields and on the borders of woods, flowering in June and July.

The root, which is the officinal portion, is said to possess tonic, expectorant, sudorific, narcotic and purgative properties.

In full doses its use is often objectionable and sometimes hazardous, as it is drastic, even in small doses, and in larger ones causes vertigo, nausea and bloody stools; still it is extensively used throughout the United States. The root is intensely bitter; the decoction is moderately bitter, less so than the tincture.

In small doses it is decreed to be simply a bitter tonic; and enters into various preparations in the treatment of prolapsus, general weakness and obstructions.

It may prove homœopathic to nausea, vomiting, dizziness from disorder of the stomach, diarrhœa, cholera-infantum and dysentery. It deserves a careful proving.

ANAGALLIS-ARVENSIS.

SCARLET PIMPERNEL. POOR MAN'S WEATHER-GLASS. RED CHICKWEED.

AUTHORITIES.

Schreter Arch. Hom., see Metcalfe's Hom. Provings. (51.) Wood and Bache. (7.)

GENERAL REMARKS.

This plant belongs to the order of Prinnelaceæ in the rational system; Pentandria, Monogynia, Linn. It is found near New-York, and on Long-Island, and Staten-Island, and is said to be the European species introduced. It flowers from June to October. (51.) It is inodorous and has a bitterish, somewhat acid taste. The ancients esteemed it a counter-poison, and in modern times it has been used as a preventive of Hydrophobia; but at present no faith is placed in its alexipharmic powers. It is, nevertheless, not wholly inactive, as Orfila found three drachms of it sufficient to destroy a dog, with marks of inflammation of the bowels. Another species considered by Linnæus as a mere variety of the *A.-arvensis*, is *A.-cœrulea*, distinguished by its blue flowers. The medicinal properties of the two, as far as is known, are the same. (7.)

The expressed juice of the whole plant is used. (51.)

Dioscorides says, "that the *Anagallis* has the power of mitigating and arresting inflammations. It draws foreign substances out of the body, and represses corrosive ulcers. Its juice evacuates the brain of phlegm, if used as a gargle, and discharged by the nose. It relieves toothache, if inserted into the ear of the opposite side; used with attic honey it cures spots on the eyes and disorders of the sight. Infused in wine it is good for those who have been bitten by serpents, and for those having diseased kidneys or liver. The plant with the blue flower is said to cause the prolapsed rectum to return, while that with the red is said the cause its descent by rubbing.

Chomel says that is useful in mania and epilepsy. Hartmann, Mynsicht, Willis and others, also consider it useful in the frenzy which comes on in continued fevers. It is employed by the handful in the drinks and decoctions prescribed for hypochondriacs. The alcoholic tincture of the flowers and the extract of the whole plant, especially if mingled with the flowers of *Hypericum*, are said to be remedies not to be despised in epilepsy. (51.)

The homœopathic provings are very incomplete and unsatisfactory; they do not uphold its ancient or modern reputation, and offer but few hints for any new application of this remedy in disease. (11.)

Mind.—Great flow of spirits for several days; every thing caused pleasure. Hilarity. Mental powers very active.

Clinical Remarks.—Its use has been much urged in epilepsy and mental disturbances; and in hydrophobia, Suadicani in a long memoir strenuously urges its use, insisting that it is a specific to that disease, as Quinine is to intermittents. It is allopathic to melancholy and hypochondria.

Head.—Pressing aching in the sinciput. Spasmodic lancinations in the temples.

Eyes.—**Clinical Remarks.**—It is said to cure spots on the eyes and disorders of sight.

Throat.—Sensation of dryness and scraping in the throat.

Clinical Remarks.—Used as a gargle it is said to be useful in detaching phlegm.

Stool.—Desire to go to stool. Well-digested stool. Itching in the rectum and pressure on the sacrum, as if from piles.

Clinical Remarks.—Dioscorides recommends it in prolapsus of the rectum—the plant with the red flowers causing a *descent* of the bowel on rubbing, while that with the blue is said to cause its *return*.

Urinary Organs.—Burning pain in the urethra when urinating; sensation as if the meatus were stopped up. Tickling itching along the urethra, inciting to coitus.

Clinical Remarks.—It has been recommended against dropsy and renal and hepatic obstructions. Simon Pauli mentions a poultice of pimpernel, as a popular remedy in his country applied to the hands and feet of gouty subjects.

Genital Organs.—Desire for coitus. Burning pain in urethra before coitus, ceasing during the act.

Chest.—Pricking sensation in the chest. Violent trembling of the heart, with general trembling and coldness.

Back and Extremities.—Tensive drawing, which ascends from the left shoulder into the nape, and recommences after it had ceased. Pain in the right metacarpus. Sensation resembling cramp in the finger.

Sleep.—Agitated sleep.

Fever.—Heat in the head, slight sweat on forehead, with lancinations in the eyes. Tremblings and chills.

Clinical Remarks.—It has been recommended in the frenzy occurring in continued fevers. (51.)

ANCHUSA-OFFICINALIS.

BUGLOSSE-BORAGE.

GENERAL REMARKS.

This species of *Anchusa* is a native Europe, and unknown in the United States. It is a biennial plant, from one to three feet high, and was formerly much esteemed as a medicine. The root, leaves and flowers were officinal. These are inodorous and nearly tasteless. The root is mucilaginous and slightly sweetish, and the flowers very feebly bitter. The plant has some claim to the credit formerly attached to it of possessing cordial and exhilarating properties. It was used by the ancients in hypochondriacal affections; but as it was given in wine, the elevation of the spirits was probably due to the vehicle. In France the *Anchusa-Italica*, which is there known as Buglosse, is employed for the same purposes and in the same manner as *Borago-officinalis*.

The dyer's "Alkanet" is another *Anchusa* (the "*A.-tinctoria*"), but though formerly employed in the treatment of several diseases, is now exclusively used as a coloring agent.

ANDROMEDA-ARBOREA.

SORRELL-TREE.

GENERAL REMARKS.

A beautiful indigenous tree, growing in the valleys of the Alleghany mountains, from Pennsylvania to Florida. The leaves have a very pleasant acid taste, which has given rise to the common name of the tree. They are used by hunters to allay thirst, and form in decoction a grateful refrigerant drink in fevers. The other species of *Andromeda* are shrubs, and some of them ornamental. Dr. Barton in his

collections states that a decoction of *A.-Mariana* is usefully employed in the southern states as a wash in a disagreeable ulceration of the feet to which the negroes are liable.

The powder upon the leaves and buds of the *A.-Speciosa* is said to be a powerful errhine. (7.)

This remedy deserves a more careful proving. (11.)

ANETHUM FŒNICULUM.

FŒNICULUM VULGARE ET DULCE. *Common and Sweet Fennel.*

GENERAL REMARKS.

The *sweet* fennel is sweeter and more aromatic than common fennel seed, and is eminently entitled to the name of sweet fennel. The whole plant has an aromatic odor and taste, owing to a volatile oil by which it is pervaded; that cultivated here is sweeter and more aromatic than that from abroad, probably in consequence of its greater freshness. It is cultivated largely in Italy and Sicily for the sake of the shoots, which are eaten raw, or in salad, or boiled as pot-herbs.

The odor of fennel-seed is fragrant, its taste warm, sweet and agreeably aromatic; it is among our most grateful aromatics, and in this country much employed in the old school as a carminative and as corrigent of other less pleasant medicines, especially senna and rhubarb. In infants it is employed as a tea, or injection, to produce the expulsion of flatus.

In most of the ancient books on the practice of medicine we find it in common use as a modifier and corrective of cathartic infusions, to prevent griping, and to obviate flatulence. As far back as Hippocrates can its employment be traced. Up to the present time no homœopathic proving has been made of it, and we are only able, therefore, to lay before our readers the very slight knowledge extant respecting it.

ANETHUM-GRAVEOLENS.

DILL-SEEDS.

GENERAL REMARKS.

This plant is a native of Spain, Portugal and the south of France, and is found growing wild in various parts of Africa and Asia; it is cultivated in all the countries of Europe and has been introduced into our gardens.

The seeds are the only part used; their smell is strong and aromatic,

but less agreeable than that of fennel-seed; their taste is moderately warm and purgent. They are seldom used in this country.

In flatulent colic of infants, in hiccough of children, and vomiting immediately after nursing, it is in common use as a domestic remedy. It is supposed to impart tone to the stomach, and to rouse into increased activity the digestive organs.

It is not improbable that a careful proving might develop latent and valuable properties which are now unknown.

ANGELICA-ARCHANGELICA.

GARDEN ANGELICA.

GENERAL REMARKS.

This plant is a native of the north of Europe, and is found in the high mountainous regions in its southern section, as in Switzerland and the Pyrenees. It is cultivated in various parts of Europe, and may be occasionally met with in the gardens of this country. The whole plant has a fragrant odor and aromatic properties, but the root and fruit only are officinal.

The root is spindle-shaped, an inch or more in thickness at its upper extremity, and beset with numerous long descending radicles. The fresh root has a yellowish grey epidermis, a fleshy yellow parenchyma, and when wounded yields a honey-colored juice, having all the aromatic properties of the plant.

The seeds, as the fruit is commonly called, are two or three lines long, oval obtuse or somewhat notched at the ends, flat and marked with a longitudinal furrow on one side, convex, with the angular ridges on the other.

It is an elegant aromatic tonic, but is little used in the United States. The Laplanders, in whose country it flourishes, are said to esteem it highly as a medicine and condiment. In Europe the stems are frequently made into a preserve, and in deserts in order to excite the stomach. The dose of the root or seeds is from thirty grains to a drachm. (7.)

ANGUSTURA-SPURIA.

BRUCEA ANTI-DYSENTERICA.

False Angustura-bark.

AUTHORITIES.

Jahr. (32.) Christison. (9.) Wood and Bache. (7.) Dunglison. (16.) Frank's Magazine. (4.) Peters. (11.) Am. Jour. Med. Sciences. (17.) Marcy. (10.) Snelling. (42.)

GENERAL REMARKS.

(At the time when this drug was proved in this country under the direction of Dr. Hering, it was supposed to be derived from the *Brucea-anti-dysenterica*, and thence received its name. According to more modern investigations, however, it has been decided to arise from a variety of the *Strychnos* species, similar to, if not identical with the *Nux-vomica*. Pereira unequivocally pronounces it the *Nux-vomica*, and gives numerous cases of poisoning, which certainly would appear to substantiate his views, the symptoms observed being identical with those produced in acute poisoning with the *Nux-vomica*; but the matter appears still to be involved in some doubt. Dunglison, however, looks upon the *Nux-vomica* as a different plant, and recommends the preparation of *Brucin* from the *Brucea-anti-dysenterica* in preference to the *Strychnos Nux-vomica*, in consequence of the *Brucin* from the latter being always combined with a small amount of *Strychnia*.)

Under this title the European writers on *Materia Medica* describe a bark which was introduced on the continent mixed with the true *angustura-bark*, and which possessing poisonous properties, in some instances produced unpleasant effects, when prescribed by mistake for that medicine. It is distinguished by its greater thickness, hardness, weight and compactness; by its resinous fracture; by the appearance of its epidermis, which is sometimes covered with a ferruginous efflorescence, sometimes is yellowish grey, and marked with prominent white spots; by the brownish color and smoothness of its internal surface, which is not like that of the genuine bark, separable into laminæ; by the white slightly yellow powder which it yields, by its total want of odor, and by its intense tenacious bitterness. Analysed by Pelletier and Caventou, it was found to contain a peculiar alkaline principle which they called *Brucin*, and upon which its poisonous operation depends. In consequence of its presence, a drop of Nitric-acid upon the internal surface of the bark, produces a deep blood-red spot. The same acid applied to its external surface renders it emerald green. In the true *Angustura-bark*, a dull red color is produced by the acid on both surfaces. (7.)

The false *Angustura* was at first supposed to be derived from the *Brucea-anti-dysenterica*; and was afterwards referred to some unknown species of *Strychnos*, in consequence of containing *brucin*, which is a characteristic ingredient of that genus of plants. At present it is generally believed to be derived from *Strychnos Nux-vomica*, the bark of which according to Dr. O'Shaughnessy, exactly corresponds with the description given by authors of the false *Angustura*, and like it contains *brucin*. (7.)

Pereira unequivocally pronounces it the *Nux-vomica*.

It is classed among the simple tonics or bitters, and is very similar to them in its action, though perhaps rather more energetic in larger doses. In small doses its effects resemble those of *Gentian*, *Calumbo*, *Quassia*, &c.

TOXICOLOGICAL EFFECTS.

Christison says, a species of bark, commonly called the false Angustura-bark, was introduced by mistake into Europe instead of the true Angustura-cusparia, or bark of the Galipea-officinalis. It was long supposed to be the bark of the Brucea-anti-dysenterica; but is now known to be the bark of the Strychnos Nux-vomica. It is a poison of great energy. It gave rise to so many fatal accidents soon after its introduction, that in some countries on the continent all the stores of Angustura were ordered to be burnt. It contains a less proportion of Strychnin, *but more of the alkaloid Brucin* than Nux-vomica, the seed of the plant. According to Andral, Brucin is twenty-four times less powerful than Strychnin, but the bark itself is nearly as strong as Nux-vomica, for Orfila found that eight grains killed a dog in less than two hours. The symptoms it induces are nearly the same as those caused by Nux-vomica. It appears that during the intervals of the fits the sensibility is remarkably acute; a boy who fell a victim to it implored his physician not to touch him.

CASE 1.—Professor Marc, of Paris, was once violently affected by this poison, which he took by mistake for the true Angustura to cure ague. He took it in the form of infusion, and the dose was only three-quarters of a liqueur-glass-full; yet he was seized with nausea, pain in the stomach, a sense of fullness in the head, giddiness, ringing in the ears, and obscurity of vision, followed by stiffness of the limbs, great pain on every attempt at motion, locked jaw and impossibility of articulating.

CASE 2.—Dr. Darwin has given an account of its effects on the Javanese criminals, who used formerly to be executed by darts poisoned with the Strychnos tieuté, the plant which yields the upas tieuté, one of the Javanese poisons. The account quoted by him is not very authentic; yet it accords precisely with what would be expected from the known qualities of the poison. He says that a few minutes after the criminals are wounded with the instrument of the executioner, they tremble violently, utter piercing cries, and perish amidst frightful convulsions in ten or fifteen minutes. (9.)

Hahnemann, who evidently mistook the Angustura-spuria for the A.-vera, has the following remarks upon the effects of an over-dose of the medicine prepared from this bark. "The Angustura-bark possesses most powerful medicinal properties, so that when obtained fresh from the tree, as it now generally is, it may, like all other highly powerful drugs, cause serious consequences when improperly administered.

CASE 3.—A child, six and a half years old, who had been given three teaspoonfuls of a decoction of Angustura, made of five ounces of bark, reduced by evaporation to five ounces of liquid, i. e., about an ounce and a half of the extract of Angustura, died in two hours under the following alarming symptoms. Tremblings, becoming violent in about half an hour; tetanic convulsions on touching the arm; eyelids

wide open; eyes fixed, staring and immovable; the jaws fixed; the lips wide apart, showing the whole of the front teeth; tension of some of the muscles of the face; the limbs fully extended and stiff; the spine and head thrown violently back; the body from time to time was slightly raised, and shaken by a violent shock, like an electric shock, along the back; the cheeks and lips became blue; the breathing interrupted. After a paroxysm of six minutes' duration the child breathed with much effort, the cheeks and lips becoming pale. There was frequent desire to drink coffee. Swallowing tepid water caused tetanic spasms. Pulse 200, spasmodic and irregular. The tetanus sometimes appeared of its own accord, at others from noise or from contact with anything, and the child continually cried out from fear of being touched. After the tetanus the eyes were closed; the face and forehead covered with perspiration; cheeks and lips blue; moaning, apparently without pain. The whole body flexible and soft; the eyes glazed, with convulsive breathing at long intervals. Half an hour after death the whole body became stiff. After twenty-four hours, on opening the veins the blood was found liquid and brownish; the right lung pale and emphysematous externally, full of blood internally. The left lung was blue externally, blackish at the division of the lobes, and very full of blood.

Other facts also prove that too powerful doses of Angustura produce spasmodic convulsions, giddiness, anxiety, and loss of consciousness.

CASE 4.—Dr. Wuerzner says that four persons, each of whom took ten or twelve grains of the extract of Angustura in the form of pills, were seized with stiffness somewhat analogous to tetanus in all the muscles of the body, with tremors of the jaws, and fell suddenly to the ground without losing consciousness. Symptoms much resembling these, only much less violent are related in the provings of this medicine on persons in health. (50.)

EMMERT, from thirty experiments on animals concludes that the following are the principal effects of Angustura-spuria. (4.)

Difficult and at first quickened respiration; frequent, and afterwards spasmodic pulse; an anxious, timid state of mind; diminished control of the muscles, especially of the inferior extremities, spasmodic rigidity of the limbs, and frequently of the muscles of the chest; trembling as if from electric shocks; jerkings and startings, especially along the spine, excited by great, slight, or even scarcely perceptible impressions; attacks of *Tetanus*, especially in the form of *opisthotonos*, excited by the slightest causes; in these attacks the head and spinal column are bent back in the extreme manner, and the limbs are stretched out; the chest and limbs become fixed and rigid; the eyelids and pupils are extended to the greatest degree, and the eyes are projected rigidly and immoveably far out of their sockets; the lower jaw is pressed firmly against the upper, and the face is distorted; the pulse becomes slow, small and spasmodic; respiration ceases almost entirely, and red parts become

blue. In from $1\frac{1}{4}$ to $1\frac{1}{2}$ or 2 minutes the tetanic paroxysms relax, the pupils and eyelids contract, the eyes sink back into their sockets, and the body becomes soft and flabby, respiration returns with difficulty and great exertion, but gradually becomes freer, and still remains obstructed, and the arterial blood continues darker than natural; the pulse becomes more frequent, larger and freer, but still remains somewhat tense and hard. The irritable and excitable state of the muscles still continues and the nervous attacks return at longer or shorter intervals. (4.)

Consciousness and sensation are not at all lessened, but are rather heightened, and a certain timidity and fearfulness is developed which may be compared to the pantophobia of hydrophobia.

No perceptible evacuations are caused by *Angustura-spuria*; vomiting does not occur, nor diarrhœa. (4.)

After death the irritability of the muscles and nerves is not diminished; the involuntary muscles retain their irritability longer than the voluntary, and the heart is not paralyzed. *The rigor mortis* sets in more decidedly and quickly than common. (4.)

Putrefaction is not hastened, and no organic post-mortem appearances are found, except a great accumulation of venous blood in the large veins, and even in the arteries. Still this venous blood does not exhibit any other alteration, but coagulates in time like other venous blood, and undergoes the same changes from exposure to the air.

The general effects of the remedy are experienced in about seven minutes, and occur suddenly; it proves rapidly fatal, often in the first attack of tetanus. Convalescence is slow, and the lower limbs recover more slowly than the upper. Death takes place from a general nervous affection, attended with spasmodic rigidity of the chest and consequent obstruction of the circulation. (4.)

CASE 5.—A man, aged 52, had suffered for fifteen years with a *neuralgia frontalis intermittens*, which returned every two years, occurred regularly after dinner for three months; it had been relieved once with China but this now failed; he took twelve grain doses of Pulv. Cort. *Angusturæ*, twice a day; he had slight stupefaction after the third dose; but half an hour after the fourth, he was taken with vertigo after rising from his chair, fell back and had spasms in his legs; which were relieved by rest and excited by the slightest motion; his speech was hurried and attended with spasmodic contractions of the muscles of the face (slight trismus); his face was pale, pulse weak and quick, skin soft and head covered with perspiration. All these symptoms ceased in $1\frac{1}{2}$ hours; the paroxysms of neuralgia were much altered, so that on the third day only some slight pressing headache was left, and this ceased in twenty-four hours more and left him quite well. (4.)

On account of the large quantity of *Brucea* which the false *Angustura* contains, it will be proper to make a few remarks on this substance.

BRUCEA.

The alkaloid Brucea or Brucin, was discovered by Pelletier and Caventou in 1819, in the bark of the false Angustura, *Brucea-anti-dysenterica*. It is found also in small quantities, in Nux-vomica and in the St. Ignatius bean.

Pure Brucin, obtained by a process of precipitation is of a white color, and in regular crystals of the form of oblique prisms, having a base representing a parallelogram; it has a pearly lustre, and very bitter taste. With acids brucea forms neutral salts, which differ from the salts of strychnia.

EFFECTS ON THE SYSTEM.

It acts energetically on the animal economy in the same manner as false Angustura, but much more strongly. It is similar in its operation to strychnia, but is considered to be weaker in the proportion of one to ten, according to Pelletier; of one to twelve according to Magendie and one to twenty-four, according to Andral. It requires four grains to kill a rabbit, whilst half a grain of strychnia is sufficient. A tolerably strong dog, to which three grains of Brucea had been given, was affected with symptoms resembling tetanus, but did not die.

Pelletier is of opinion that Brucin or rather the alcoholic extract of false Angustura, might be substituted in practice for the extract of Nux-vomica; its action is nearly the same, while there is no danger of its acting too violently. Andral has frequently prescribed it, and his deductions are that it is far more under control than strychnia. Like strychnia it has been given in cases of *paralysis* with varying success. It would appear to have acted most beneficially in that resulting from lead poisoning. M. Bricheteau, from his observations on man, and M. Bouchardat from his on animals, infer that Brucin is more active than is usually admitted. In *paralysis succeeding apoplexy*, the former employs it with much advantage, and asserts with M. Andral in its being more manageable than strychnia. He is of opinion, that no benefit is to be expected from it in paralysis until six months have elapsed from the attack of apoplexy. Earlier than this it may induce serious effects, owing to its toxical effects on the cerebro-spinal system. He commences with about the sixth of a grain, and increases the dose each day by the same quantity, so long as no effect is induced. Should convulsions supervene it must be discontinued, until the effects are decidedly diminished, when it may again be augmented.

Magendie administered it with success in one case of atrophy of the leg, and another of the arm; and Lepelletier suggests its use in impotence. (16.)

EFFECTS ON THE NERVOUS SYSTEM.

Nerves of Motion.—Some interesting experiments were made by Emmert to show that it acts on the *spine directly*, and not on that organ through the medium of the brain. If an animal be poisoned by inserting the extract of false Angustura-bark into its hind legs after the spinal cord has been severed at the loins, the hind legs as well as the fore legs are thrown into a state of spasm: or if the medulla oblongata, be cut across and respiration maintained artificially, the usual symptoms are produced over the whole body, by the administration of it internally or externally—the only difference being that they commence more slowly, and that a larger dose is required to produce them, than when the medulla is not injured. On the other hand, when the spinal cord is suddenly destroyed after the symptoms have begun, they cease instantaneously, although the circulation goes on for some minutes. (9.)

It is undoubtedly true, that the great centre of the action of this drug is upon the anterior or motor portion of the spinal column, and upon the motor nerves and muscles generally. In this respect it is very similar in its action to that of Nux-vomica, Strychnine, Ignatia, and Cocculus. (11.)

Many physicians suppose that it exercises a specific action upon the brain, because the intellectual faculties are occasionally disturbed during its operation. This mental disturbance is usually only momentary, and occurs when the system is violently effected by the drug. Flourens and Orfila, who made many experiments with the bark, suppose that its principal specific effect is upon the spinal marrow. (10.)

Nerves of Sensation.—It does not act specifically upon these parts, but has occasionally effected cures of so-called neuralgias; it is most homœopathic to pains arising from compression of the nerves, in consequence of violent spasmodic action of the muscles; in this respect it differs from Belladonna, Stramonium, Conium and Plumbum, which produce relaxation of the muscles. (11.)

In some instances it renders the nerves of sensation morbidly sensitive. Orfila alludes to one case of this kind, and a medical friend has witnessed a similar effect from a few doses of the first trituration. (10.)

Ganglionic Nerves.—We have no evidence that it acts specifically upon these nerves, but it may be supposed that it does act upon those portions of the great sympathetic nerve which preside over the involuntary muscles. (11.)

In animals poisoned by it, it has been observed that the involuntary muscles preserve their irritability, while that of the voluntary muscles is lost. (10.)

ON THE VASCULAR SYSTEM.

Heart and Arteries.—It doubtless acts specifically upon the *muscular coat of the heart*; and also upon that of the arteries, as we believe with Hunter, Charles Bell, Carpenter and Hartshorne, that all the arteries have a muscular coat, which is endowed, like the other muscular tissues, of hollow viscera, with a power of alternating contraction and relaxation; that this arterial contraction is exerted in immediate connection with and succession upon the beat of the heart; the arterial systole thus combining with that of the ventricles of the heart to make up the pulse.

In case three, the pulse was 200, spasmodic and irregular; in Emmert's cases the pulse was frequent and afterwards spasmodic; or slow, small and spasmodic, afterwards becoming more frequent larger and freer, but still tense and hard; in case five, the pulse was weak and quick. (11.)

Clinical Remarks.—It is homœopathic to spasms of the heart and arteries. It is antipathic, but might prove curative to cases like the following: A feeble, spare old lady, found on rising in the morning, that she had lost to a great extent, the use of both arms, and that they were cold; on examination no pulse could be felt in either arm, except at the axilla, and there it was feeble: by the continued use of heat, friction and other stimulants, the usual temperature and the muscular power were for the most part restored, but the limits of pulsation were but little extended; and this continued to be so while the patient remained under observation, which was several years. If the pulse had depended upon the mere tonicity of the arteries, the phenomena of this case could not have occurred; it can only be explained on the supposition of a paralysis of the muscular coat, thus preventing "the arterial systole." In a deficiency to a greater or less degree of this "arterial systole" we have the explanation of the fact so often observed by physicians, that the force of the pulse does not always correspond with the force of the heart's action. In short, we may assume that Angustura, Nux-vomica, Strychnine, Ignatia and Brucea act specifically upon the arterial, or *vaso-motor nerves*. (11.)

Angustura produces both a direct and an indirect action upon the arterial system. Its direct action, like that of Nux, Ignatia, &c., is in the first instance exciting—rendering the action of the heart and arteries morbidly active, and sometimes irregular, but followed sooner or later by a corresponding depression, which sometimes amounts to paralysis. This paralysis is most apt to attack the blood-vessels of the extremities, but may prostrate the entire circulatory apparatus. (10.)

Its indirect action is due to its impression upon the spinal-marrow. Whenever this structure is morbidly excited, whether by natural causes or by the operation of drugs, a great variety of reflex phenomena are superinduced, like accelerated and irregular respiration, involuntary spasmodic movements of different parts of the body, morbid

sensitiveness of the entire surface, and an accelerated and irregular action of the heart and arteries. It is therefore no easy matter to determine what phenomena are produced by this active substance from an actual impression upon the vessels of circulation, and what are reflex symptoms arising from its action upon the spinal-marrow. (10.)

Fever.—It is supposed to be most homœopathic when there is a chilly feeling, dread of the open air, great coldness, shuddering with a good deal of thirst, and sweat while walking. Rapid pulse, intense thirst, general trembling, or involuntary jerkings of different parts of the body, great sensitiveness to touch, symptoms all increased by mental emotions, noise, light, or motion.

Clinical Remarks.—A delicate youth, aged eighteen, had suffered for two months with a regular tertian fever and ague, which had resisted all remedies. He then took *Angustura-spuria* in small doses, followed by a slight abatement of his attacks in a few days, when half an hour after taking a dose he felt generally unwell, followed by a convulsive state with very violent agitation of his limbs, distension of the epigastrium, fixed and glistening eyes; this state lasted for one and a half hours, in spite of all antidotes. The next day he had no attack of fever, and the *Angustura* was continued in very small doses, followed by a speedy recovery. Similar effects were observed in several other cases. (4.)

We have prescribed it with prompt benefit in the case of a young lady who had suffered for several months with daily febrile paroxysms dependant upon chronic spinal irritation. The fever commenced about noon, without any previous chill, and was usually accompanied by the following symptoms: very rapid and feeble pulse, intense thirst, extreme sensitiveness of the entire surface of the body, dull pain in the forehead, sensitiveness of the eyes to light, rapid and painful respiration; irritability, flushed cheeks, and general sense of uneasiness. The remedy was administered at the 3d dilution, at intervals of four hours, for three days, when the febrile symptoms ceased, and the patient rapidly convalesced. (10.)

Venous System and Blood.—It seems to have a marked tendency to increase the quantity of venous blood in the system. In case three, the cheeks and lips became blue; the blood in the veins was found liquid and brownish; the left lung was bluish externally and very full of blood. In Emmert's experiments, red parts became blue; the external blood was darker than natural, while there was a great accumulation of venous blood in the large veins and even in the arteries. Still the majority of these effects may arise from the tetanic rigidity of the chest and consequent obstruction of respiration, and from pressure upon the veins and arteries by the spasmodic state of the muscles. (11.)

Clinical Remarks.—It is homœopathic to venous congestions, and

antipathic to an excessive arterial plethora, and to inflammation in general. (11.)

It is most appropriate in cases of venous congestions dependant upon epilepsy, hysteria, and other maladies accompanied by spinal and nervous irritation. In these cases it should never be employed stronger than the third dilution, else serious aggravations will be likely to result. (10.)

Lymphatic System.—We have no proof that it acts specifically upon the lymphatic vessels or glands. (11.)

Clinical Remarks.—It is not homœopathic to many dyscrasias or blood-diseases. (11.)

ON THE TISSUES.

Muscular Tissue.—Next to the motor-nerves it doubtless acts most specifically upon the muscles. The general effect of *Angustura-spuria* is to produce *convulsion of the spinal marrow and of the voluntary muscles*. Tetanic spasms, periodically excited, or aggravated by noise or contact, fright, swallowing of liquids, or feeling the pulse with undisturbed consciousness and increased sensibility, opisthotonos; trismus.

Clinical Remarks.—It is antipathic to paralysis, debility, great weariness, with nervous and mental irritation, and vacillating and trembling gait.—It is homœopathic to a disagreeable sensation of loss of mobility, owing to rigidity of the muscles, to spasmodic convulsions, tetanus, opisthotonos, trismus. Inability to bend the lower extremities, and acute pain upon every attempt to do so. In animals which have been poisoned with it, the irritability of the involuntary muscles is preserved for a time, while that of the voluntary muscles is lost.

Fibrous Tissues.—It does not seem to act specifically upon the non-contractile fibrous tissues. (11.)

Serous Tissues.—We have no evidence that it acts decidedly upon any of the serous membranes. (11.)

Mucous Tissues.—It seems to act somewhat specifically upon the mucous membranes of the nose, throat and large bowels. (11.)

Sleep.—Drowsiness in the day-time, sleep full of dreams, orgasm of the blood.

Mind and Sensorium.—Gloomy, discontented, taciturn mood, *anguish, tendency to start* (in animals). Want of mental energy, with drowsiness. Dullness particularly in the sinciput, with heaviness in the head and drowsiness. Vertigo as if he would fall, in the evening.

Clinical Remarks.—It is homœopathic to dizziness, dullness of the head, drowsiness and despondency; it has been suggested in apoplexy, and is used in the old school in paralysis consequent upon apoplexy. (11.)

It has been used with benefit in gloomy, taciturn, peevish, and obtuse mental conditions, following excessive mental and physical exertments, hysteria, and epilepsy. (10.)

Head.—Pain in the forehead, in the evening, after a long walk in the sun: over the left eye, or behind the brows, which feel as if swollen, and across the root of the nose. Creeping digging in the vertex. Dartings in the head, worse during a walk, and particularly in the sun; in the right temple, with fullness of the head, or with dartings in the ear. Buzzing sensation in the left temple. Great fullness and pressure in the head, accompanied by spasmodic twitchings of different parts of the scalp.

Clinical Remarks.—It is homœopathic to venous congestion of the head and consequent headaches. (11.)

In congestive headaches, caused by long-continued depressing emotions, by violent fits of anger, and by severe and protracted mental labor, it has been found serviceable. (10.)

Eyes.—Redness and inflammation of the canthi, with itching; itching of the eyes, with burning and injected condition of the vessels in the canthi. The eyes are painful as if they contained sand. Dim, bloated eyes. Lachrymation and redness of the conjunctiva (in animals). Staring, protruded immoveable eyes. Dazzling of the eyes. Obscuration of sight. Twitchings of the eyebrows and eyelids while reading. Dilatation of the pupils. Painful pressure of the eyeballs.

Clinical Remarks. It seems homœopathic to catarrhal inflammation of the lids, or at least to venous congestion of the eyes, and spasms of the balls and lids. (11.)

It has cured involuntary tremblings and twitchings of the eyelids, with painful fulness and pressure in both orbits, and dimness of sight. It is also homœopathic to drooping of the lids from partial paralysis. Also to involuntary trembling and unsteadiness of the eyeballs. (10.)

Ears.—Darting in the ears, at times in one and then in the other. Tingling and humming in the ears. Buzzing in the ears increased by stooping or walking rapidly.

Clinical Remarks.—It is appropriate in ringing or buzzing in the ears, and fullness and pressure in the brain, which sometimes precede and follow epilepsy, hysteria, and apoplexy. (10.)

Nose.—Pain across the dorsum of the nose, internally. Tickling in the nose, with heaviness in the head. Violent sneezing, preceded by pulsations in the nose. Violent fluent coryza, with lachrymation, restlessness, sleeplessness, feeling of coldness in the head, dryness of the mouth, and copious secretion of mucus in the throat.

Clinical Remarks.—It deserves more attention than it has received in catarrhs of the head, and influenza. (11.)

Face.—Paleness of face. Bluish color of face, particularly of the cheeks and lips. Each single muscle of the face is put upon the

stretch. Quivering sensation in the lips. Lock-jaw, the lips being quite open, and the anterior teeth exposed. Grinding of the teeth. Sweat on the forehead and in the face after the paroxysm of spasm. Itching herpes, with scaling off of the skin. Increase of existing rash. Feeling of heat in the cheeks, but without any external feeling of warmth.

Clinical Remarks.—It is homœopathic to lock-jaw, to spasms of the face, perhaps to Saint Vitus' dance; also to gritting of the teeth. (11.)

It is remedial in spasmodic twitchings of the muscles of the face, in bloated and livid conditions of the face, such as precede and accompany drunkenness, fits, and other congested states of the vessels of the face and head. (10.)

Teeth.—Fleeting, tearing pains in all the teeth and gums, aggravated by cold.

Clinical Remarks.—It is homœopathic to excessive grinding of the teeth. (11.)

Mouth, Pharynx and Œsophagus.—Increased secretion of mucus in mouth and fauces. Dryness in the Œsophagus, and burning pain in the pharynx, as if occasioned by rancid grease. Mouth open, and frequent disposition to sigh. Spasmodic closure of the mouth, causing an inability to speak.

Clinical Remarks.—It is homœopathic to catarrhal irritation of the throat, with dryness and burning. Also to dyspeptic irritation of the throat, arising from the regurgitation of rancid fat from the stomach. (11.)

It has relieved spasmodic contractions of the pharynx and Œsophagus when attempting to swallow food or drinks. In paralysis of these parts it is worthy of attention. (10.)

Appetite and Gastric Symptoms. Constant loss of appetite. Hunger with loss of appetite. Violent appetite. Bad, pappy taste. Pressure at the stomach, with palpitation of the heart, fermentation in the bowels, and vomiting of the injecta. Risings in the stomach, followed by pain, but without provoking vomiting.

Clinical Remarks.—It is homœopathic to great want of appetite, with a bad, pasty taste in the mouth, rising of rancid greasy substances from the stomach, and palpitations arising from derangement of the stomach. (11.)

In dyspepsia, with frequent eructations, tasting of food, pains in the stomach, cramps, tremblings and feelings of contraction in the stomach, it bids fair to rival Nux-vomica. From the general character of the drug we infer that it is appropriate in certain cases of gastralgia, and other neuralgic affections of the stomach. (10.)

Stomach and Abdomen.—Sensation in the stomach as of long fasting. Burning and heat at pit of stomach. Griping in the abdomen, particularly at the umbilical region; succeeded by vomiting and diarrhœa. Colic, with nausea and drowsiness. Colic ceasing after an evacua-

tion. Pinching and rumbling in the bowels. Red raised rash on the abdomen. Cramplike pain at the pit of the stomach. Eructations, followed by pressure and pain in the stomach.

PATHOLOGY.—In animals poisoned with this substance, no morbid appearances have been found in the stomach or bowels, thus indicating that the symptoms are reflex in their character. (10.)

Clinical Remarks.—A middle aged lady, tall, thin, and of a nervous temperament, was attacked after a ride of two hours' duration, with excruciating cramplike pains in the stomach and bowels. She took Colocynth, Nux, and finally a large dose of Laudanum, without relief. On arriving at the bed-side of the patient, eight hours after the commencement of the attack, we found her nearly exhausted and still suffering intensely. Two doses of Angustura-s. third dilution, at intervals of twenty minutes entirely removed the pain.

In several other instances of a similar character, where Nux appeared to have been indicated, but had failed to afford relief, we have used this remedy with prompt benefit. (10.)

Stool and Anus.—Costiveness. Frequent small evacuations of bloody mucus, with griping pains in the abdomen. Copious, soft, loose, evacuations. Great disposition to diarrhœa, with colic and flatulence. Frequent emission of flatulence. Itching of the varices towards evening.

Clinical Remarks.—It may prove useful in some attacks of dysentery and diarrhœa, especially when preceded by costiveness. (11.)

It has occasionally cured chronic constipation produced by an impaired condition of the muscular structure of the digestive apparatus. It is most efficient when the large intestines are chiefly involved. (10.)

Genital and Urinary Organs.—Lancination in the urethra. Violent burning.

Clinical Remarks.—The most important constituents of the Angustura-s., are *Gallic-acid* united with *Brucin*. From analogy, therefore, we infer that it may prove to be indicated in chronic nephritis. (10.)

As a remedy in incontinence of urine from a paralytic state of the neck of the bladder, we can vouch for its utility. (10.)

Chest.—Panting, breathing.—Interrupted convulsive and suppressed breathing. Oppression of the chest. Painful soreness of the chest, worse when lying on one side. Shooting below the mammary region, increased by respiration. Beating of the heart scarcely perceptible. Palpitation of the heart. Pain in the right side of the chest.

PATHOLOGY.—Lungs engorged with dark blood, and less crepitant than in the natural state. The blood continued in the cavities of the heart, black, partly fluid and partly coagulated.

Clinical Remarks.—It is homœopathic to the most violent tetanic

spasms of the chest, and may prove so in spasms of the bronchial tubes and spasmodic asthma. (11.)

We have recently used the sixth dilution, at intervals of an hour, in a troublesome case of irregular, jerking, and painful respiration, with entire success. Relief was given almost immediately, and the cure was complete in four hours. The symptoms in this case were dependant upon spinal irritation. (10.)

Back.—Crampy sensation in the back. Painful weariness in the loins, and region of the sacrum. Violent jerkings along the spinal column, particularly along the lower portion, as if occasioned by electric shocks, with slight raising of the trunk. Violent opisthotonos.

Clinical Remarks.—It is homœopathic to spasms proceeding from the spinal column, and to spinal irritation. (11.)

Against the violent, cramp-like pains, which accompany the passage of calculi from the kidneys to the bladder, it is an excellent remedy. It is worthy of trial against the pains which arise from chronic affections of the kidneys. (10.)

Upper Limbs.—Stiffness of the shoulder-joints. Rigidity of the upper limbs. Tearing in the arms. Cramp-like pain in the dorsum of the hand.

Free motion of the upper extremities, while the lower extremities are rigid and painful upon every attempt to bend them.

Lower Limbs.—Feeling of lameness in the right thigh. Stiffness of the joint. Rigidity of the extremities. Bruised feeling in the limbs. Cramp-like pain above the knees. Weariness in the knees. Inability to bend the lower extremities, every effort to do so being attended with acute pain.

Clinical Remarks.—A remedy of value in the rigidity, and lameness which often affect the limbs of paralytics. Also in morbid sensitiveness, and involuntary and painful jerkings of the legs, it has afforded relief. We have observed its curative power in two cases of chronic stiffness, and neuralgia of the knee-joint. (10.)

A N G U S T U R A - V E R A .

GALIPEA OFFICINALIS or GALIPEA-CUSPARIA. CUSPARIA-FEBRIFUGA.

True Angustura-Bark.

AUTHORITIES.

Hahnmann (1.) Noack and Trink (19.) Jahr (32.) Wood and Bache (7.) Flora Homœopathica (50.) Bell's Materia Medica (48.) Peters (11.) Marcy (10.) Snelling (42.) Fullgraff (26.)

GENERAL REMARKS.

Angustura was first made known in Europe in 1788, by Dr. Ewer of Trinidad, and was called from the town of St. Thome d'Angustura, on the Orinoco. Its botanical source was long unknown till Humboldt and Bonpland announced the discovery of the plant in their travels in tropical America; but even after this it was for a long time involved in doubt, since by them it was long supposed that the medicinal bark was produced from the *Bonplandia-trifoliata*, (the name which was bestowed upon this tree by Willdenow in honor of its discoverers,) but Dr. Hancock, who resided in the district which yielded the bark for some years, has conclusively shown that the medicinal bark is obtained from a different species of the same genus, which differs essentially from the plant described by Bonpland; the one being a magnificent stately tree sixty to eighty feet high, while the one described by Hancock never exceeds twenty feet. This latter then, under the name *Galipea officinalis*, is the Angustura-vera and as such has been received into the various pharmacopœias.

It is a small tree, irregularly branched, rising to the medium height of twelve or fifteen feet, with an erect stem from three to five inches in diameter, and covered with a smooth-grey bark. The bark is generally brought from the West-India ports packed in casks; but according to Mr. Brande, the original package formed in Angustura or its neighborhood, consists of the leaves of a species of palm, surrounded by a net-work made of sticks. The pieces are of various lengths, for the most part slightly curved, easily quilled, sometimes nearly flat, from half a line to a line or more in thickness, pared away towards the edges, covered externally with a light yellowish-grey, or whitish-wrinkled epidermis, easily scraped by the nail, and internally of a yellowish-fawn color. They are very fragile.

According to Fischer it contains volatile oil, bitter extractive, a hard and bitter resin, a soft resin, a substance analogous to caoutchouc, gum, lignin, and various salts, among them carbonate of Ammonia. The volatile oil, which may be obtained by distillation with water, is of a pale-yellowish color, lighter than water, of an acrid taste, and of the odor of the bark. *Cusparin* is the name given by Saladin to a principle, deposited in tetrahedral crystals, when an infusion of the bark is treated with absolute alcohol, at common temperatures and allowed to evaporate spontaneously. Brande was inclined to think that Cusparin was identical with Cinchonina. The virtues of the bark probably reside in the volatile oil, and bitter principles. (7.)

Angustura had long been used by the natives of the countries where it grows, before it became known in Europe. It was first taken to Europe about seventy years since, and is now ranked among the official remedies throughout Europe and America, although not much used.

Cusparia, or True Angustura-Bark is bitter flavored, accompanied by a peculiar and somewhat aromatic pungency. Its odor, especially

when fresh from the package is rather nauseous and fishy. It exhales Ammonia when heated with caustic potassa.

General Symptoms.—Cracking in almost all the joints, but it is not audible. Itching in the evening, when in bed; after rubbing the parts, flat, very painful ulcers make their appearance. *Fainting fits, weakness, paralysis.* Paralytic weakness in the hands and elbow-joints, accompanied by chilliness and want of animal heat. (1.)

Clinical Remarks.—Hancock employed it extensively in the malignant bilious intermittent fevers, dysenteries and dropsies of Angustura and Demerara, and speaks in strong terms of its efficacy in these complaints. It is probable, however, from the testimony of physicians in Europe and in the United States, that it is better adapted to tropical diseases than to those of temperate climates. (7.)

It seems homœopathic to nettle-rash, when followed by flat, painful ulcers. (11.)

Fever.—Early in the morning, chilliness in bed, without any subsequent heat. Internal shiverings at three o'clock in the afternoon, with violent thirst, without subsequent heat, several days in succession. In the afternoon, shivering with goose skin, abating in the open air, without any thirst, for several days in succession. Increasing warmth over the whole body. Internal and external heat. (1.)

Clinical Remarks.—It was at one time considerably used in place of Peruvian bark as a febrifuge; but it has not been found successful in the treatment of intermittents in northern latitudes. (7.)

More recently Mr. Brande has spoken favorably of its febrifugic properties, and relates instances in which it has proved successful. Alibert, however, gave it a fair trial, and found it of little value; and general experience has pronounced the same verdict. (44.)

Pereira recommends it on the authority of Winterbottom in "adynamic continued fever," especially when complicated with great disorder of the digestive organs.

Merat and De Lens assert that the natives of the country where it is indigenous, regard it as superior to Quinine in the treatment of intermittent fevers. They also employ it like Quassia and Columbo in dysenteries. Brettonneau of Tours used it in several cases, but was unsuccessful.

According to Trouseau and Pidoux, Reydellet and Niel of Marseilles have administered the Angustura in powder, in five cases of vernal intermittent with entire success. Fodérê has succeeded but three times in eight cases. These acts are qualified, however, by the reflection that oftentimes the most insignificant remedy will cure an intermittent, more especially that occurring in the spring, a simple stimulant being sometimes all that is needed to enable the system to throw off the morbid influence. In order to give weight and value to a remedy it should succeed in the case of a tertian or quartan, of marked type, which has lasted from fifteen days to a month. (42.)

Mind and Disposition.—Discouragement, peevishness. Dissatisfaction. Liveliness and activity of the mind.

Clinical Remarks.—It is usually thought to have no special influence upon the brain and nervous system, but is generally regarded as a stimulant tonic, in small doses acceptable to the stomach. (11.)

Many of the phenomena enumerated by Noack and Trinks as due to this variety of Angustura, belong properly to the false Angustura. It has been ascertained that much of the bark which was formerly sold in Europe was composed of a mixture of both varieties, so that we are left in some doubt with regard to the pathogenetic and therapeutic effects peculiar to each kind.

It is probable that whatever influence may be exerted by this substance upon the mind and disposition, should be attributed to its general tonic properties rather than to any direct influence over the brain and nervous system. (10.)

Sensorium.—Sense of contraction of the head, when walking rapidly. Sudden great dulness of the head. Great absence of mind. Inability to concentrate the mind. (32.)

Clinical Remarks.—It seems homœopathic to the dulness of the head, &c., which often attend dyspepsia, or general nervous debility and torpor of the system. (11.)

It has been much used in the West Indies in bilious intermittent fevers and in bilious dysenteries. From its successful employment in these cases, we infer a slight alterative action upon the liver; and it will doubtless prove homœopathic in the dullness, depression, and other mental conditions dependant on functional derangement of the liver. (10.)

Sleep.—Great sleepiness in the evening, until nine o'clock, afterwards one is wide awake until after midnight. Uneasiness, early in the morning, frequent yawning and want of disposition to do any kind of work. Frequent yawning with stretching of the limbs. Uneasy sleep. (1.)

Clinical Remarks.—It is indicated in drowsy, stupid, and indolent states, which are symptomatic of jaundice, liver complaints, and other maladies accompanied by bilious disorder. (10.)

Head.—Contractive, pressing head-ache. Head-ache with heat in the face, especially at night. (19.) Gloominess and dullness of the head, as after a previous intoxication, great apathy of the mind. Drawing and oppressive pain in the temporal region. Vertigo in the open air. (1.)

Clinical Remarks.—It seems homœopathic to the head-aches and dullness of the mind which arise from excessive intellectual labor, from dyspepsia, or bilious derangements. (11.)

It has occasionally afforded relief in nervous head-aches arising from excessive sanguineous, and seminal losses. But the benefit in these instances has been only temporary, thus proving its remedial

power to be due to its general stimulant and tonic action, and not to any real specific influence upon the nerves themselves. (10.)

Eyes.—Violent burning in the eyes. Soreness of the eyelids. The eyes are red and burn; in the morning they seem to be agglutinated. Early, on rising, dimness before the eyes, as if the cornea were obscured. (1.)

Clinical Remarks.—It may prove useful in the irritation of the eyes, which attend some dyspeptic and bilious complaints. (11.)

Ears.—Stitches. Burning in internal ear. Very painful, tearing twitching in the internal ear. Tearing in a tumor over the right mastoid process. (4.) And cramps in the external ear.

Clinical Remarks.—It may deserve more attention in diseases of the ears than it has yet received. (11.)

Face.—Tensive pain in the temporal muscles, when opening the jaws. Lame, painful feeling in the masseter muscles. Cramp-like pain near the articulation of the jaw, in the muscles. Sensation of corrosive soreness deep in the nose. (1.)

Clinical Remarks.—It seems homœopathic to some painful and spasmodic affections of the muscles of the face, and to act somewhat specifically upon the muscles and motor nerves; but it is very probable that the above symptoms were produced by the Angustura-spuria. (11.)

A young lady aged about eighteen years, of a nervous temperament, tall, slender, and pale, had been afflicted with intermittent neuralgia of the face for seven months. The paroxysms usually came on shortly after breakfast, and continued at intervals until bed-time. She had taken Quinine, Arsenic, and Mercury allopathically, and had been under homœopathic medication for several weeks without material benefit.

On the 10th of Jan. 1857, the case presented the following symptoms. Acute pains in both cheeks, occasionally darting through the eye-balls, and temples, greatly aggravated by stooping, stepping, or by mental excitement, general debility, depression of spirits, frequent chilly sensations, occasionally nausea and looseness of the bowels. Four doses of the first dilution were prescribed daily, and at the expiration of six days all unpleasant symptoms had disappeared. (10.)

Jaws and Teeth.—Great dryness of mouth and lips without any thirst. Drawing pain in the teeth and upper jaw. (19.) When chewed it leaves for some time a sense of heat and pungency in the mouth, throat and fauces. (44.)

Gastric Symptoms.—Taste in the mouth like that of peach-kernels. Bread tastes sour. Nausea during a walk, as if he would faint, accompanied by great lassitude all over, not relieved by sitting down. Many eructations after a meal; empty, bilious eructations; extremely painful pinching stitches in the tip of the tongue. Roughness, dryness of tongue, palate and fauces, worse on swallowing. Great de-

sire for cold drinks. Frequent hiccough. Nausea, especially during a meal. (1.)

Clinical Remarks.—It seems to act upon the stomach somewhat similar to *Cocculus*, and *Nux-vomica*, and may be employed against acidity, nausea, bilious derangement, flatulence, dryness of the mouth and throat, especially when there is an excessive desire for cold drinks, with more or less lassitude and inclination to faint. In the dominant school it is regarded as a valuable remedy in cases of dyspepsia, with diarrhœa, and loss of appetite. In cases of flatulency attended with nausea, if taken an hour before dinner it will often restore appetite and digestion. (11.)

It has been used successfully in enfeebled states of the stomach caused by abuse of stimulants, and irregularity in eating. Also in nausea and general debility accompanying slight functional derangements of the liver. Its curative power in these instances is probably attributable to its general tonic properties. (10.)

Stomach.—Cramp-like pinching pain below the pit of the stomach in the evening, when sitting. Cutting tearing in the pit, increased by moving the trunk, after dinner. (1.)

Clinical Remarks.—In large doses it evacuates the stomach and bowels, and is often employed for this purpose in South America. (7.) It has been recommended in dyspepsia and other diseases in which a tonic treatment is demanded. (7.)

It has the advantage over Peruvian Bark that it is less apt to oppress the stomach.

It is said to promote digestion, increase the appetite, expel flatus, and does not cause constipation. (44.)

Abdomen.—Early in the morning, diarrhœa comes on after previous colic, and nausea; the last evacuation was mere slime. Cutting under the short-ribs, also in the left lumbar region, and hypogastrium, with pressure towards the rectum. Cramp-like colic when walking. Pressure in the hypogastrium, accompanied by anguish. Fermenting and loud rumbling in the abdomen, as if diarrhœa would come on, accompanied by incarceration of flatulence. Painless shifting of wind, grumbling and gurgling in the intestines, continuing almost unceasingly for three hours. (1.)

Clinical Remarks.—In large doses it is apt to vomit and purge; it seems homœopathic to wind-colic, to excessive formation of flatulence, and great rumbling in the bowels, to diarrhœa with or without slimy stools. (11.)

Many of its pathogenetic symptoms correspond with those of China, and it is therefore now and then employed with advantage in diarrhœas, flatulency, and other abdominal troubles, in which China is indicated, but fails to afford prompt relief. In the last stages of cholera-infantum, it has sometimes been prescribed with speedy benefit. (10.)

Stool and Anus.—Indications of diarrhœa, with dragging through all the intestines, also with shiverings over the face. Sensation in the rectum as if it would protrude, followed by a yellow, soft and copious evacuation. Three very thin stools in the space of four hours. Emission of fetid flatulence. (1.) Diarrhœa with pinching pain in the bowels, accompanied by nausea, also discharge of slime from the rectum. Tickling, itching about the anus, as if caused by ascarides. (19.)

Clinical Remarks.—It is said to be particularly efficacious in bilious diarrhœas and dysenteries. (7.)

In the latter stages of diarrhœa and dysentery it may be given with advantage. In the diarrhœa of children when the fœces are loaded with mucus it proves useful. Dr. Lettsom speaks highly of its efficacy. (44.) It is also said by Bell to be particularly useful in dysentery and chronic diarrhœa, especially that form of diarrhœa to which persons who have resided in warm climates are frequently subject, and which often assumes even in this country, more or less of a dysenteric character. (11.)

Several physicians have found the use of this remedy in choleroïd diseases of the greatest importance, and especially during epidemics. One of our most experienced and busy practitioners has used it in numerous cases, with *invariable success*. And when we carefully peruse the pathogenesis of the remedy we see no reason why its range of use will not entitle it to the highest consideration, in diarrhœa and dysentery, when accompanied with cutting, crampy or drawing aching pains in the abdomen, especially in the lower abdomen, and spasm of the muscles.

It is appropriate in diarrhœas of typhus and intermittent fevers, and in many of those which accompany excessive weakness of the entire system. Merat and De Lens assert that it is used with success by the natives of the countries where it is indigenous in dysenteries. We have witnessed its good effects in low forms of *cholera infantum*. (10.)

Urinary Organs.—Frequent desire to urinate, with scanty discharge. Tenesmus of the bladder, followed by the emission of a quantity of white urine. Tenesmus after micturition. Burning after micturition. Orange-colored urine, which becomes quickly turbid. (1.)

Clinical Remarks.—It seems homœopathic to some derangements of the bladder and urinary organs, such as often attend dyspeptic complaints, especially when the urine is white as if loaded with phosphates, or is orange-colored and easily becomes turbid, attended with tenesmus of the bladder and scanty discharge of urine. (11.)

It has proved curative in cases of scanty, red or orange-colored urine, accompanying intermittent fevers. (10.)

Genital Organs.—Traction in the left spermatic cord, alternating with twitches accompanied by a sensation of shivering in the neighboring parts of the scrotum and thigh. (1.)

Clinical Remarks.—It may relieve some painful affections of the spermatic cord, such as are apt to occur in dyspeptic individuals, or in those affected with derangement of the kidneys and bladder. (11.)

Larynx and Trachea.—Titillation in the larynx, inducing a dry, short and hacking cough, continuing for a long time. Tenacious phlegm in the throat, which it is difficult to hawk up. (1.)

Clinical Remarks.—It may prove useful against some troublesome hacking coughs, such as arise from irritation or dryness of the throat, or are sympathetic of some derangement of the digestive organs.

We recently administered a few doses of the third dilution to a consumptive patient who was afflicted with a dry, hacking-cough, proceeding from a tickling at the throat-pit, and at the upper part of the lungs, accompanied by great oppression of the chest, and found that each dose produced an aggravation of all the symptoms. The medicine was omitted for several days, but no reactive amelioration ensued. A few weeks afterwards, the same remedy was again prescribed, and with precisely the same results. (11.)

Chest.—Cutting pressure in both sides of the chest; at first only during an expiration; afterwards the pressure changed to cutting thrusts, continuing even when the breath was held, feeling of tightness of the chest; palpitation of the heart. Painful sensitiveness of the chest; even on slight pressure. Pain in the muscles of the chest. (1.)

Clinical Remarks.—It is homœopathic to some of the pains in the chest and derangement of the action of the heart which occur in consequence of derangement of the digestive organs. (11.)

Back and Neck.—Early in the morning, when in bed, pain in the small of the back, as if every thing were broken; after having risen from the bed, she was unable to pick up anything from the floor, until several hours had elapsed; this symptom was followed by hunger, cutting pains in the abdomen and loose stools, which finally became slimy. Squeezing pressure in the small of the back, as if the parts had been bruised by blows, interrupting sleep. Tension in the muscles of the back. (1.) Painful stiffness, resembling a drawing between the scapulæ, and in the nape of the neck, early in the morning, when in bed; when rising, she was unable to move her arms on account of the pain, nor was she able to turn her neck, the whole forenoon; this symptom occurred several mornings in succession, lasted until noon, accompanied by languor of the whole body. (32.) Pretty violent trembling in the muscles of the neck, on the left side. (1.)

Clinical Remarks.—It promises to be one of the most important homœopathic remedies in lumbago, and spinal irritation. (11.)

Superior Extremities.—Painful twitching in the deltoid region. Lameness, a feeling of paralysis is experienced on keeping the arm extended for any length of time. Stiffness in the joints of the elbows,

accompanied by lassitude of the forearms. Cramp-like traction in forearm, hand and fingers. Aching of the humerus as from a bruise.

(1.) Feeling of numbness in different fingers. (19.)

Clinical Remarks.—It seems to act powerfully upon the muscles and motor nerves of the arms, and may prove useful in some painful spasmodic or partial paralytic affections of these parts. (11.)

Some physicians are in the habit of employing it against the weakness, stiffness, and numbness which sometimes remain in the extremities after severe attacks of rheumatism and paralysis. (10.)

This medicine, according to Noack and Trinks, has a remarkable specific action on the motor and spinal nerves. The two following cases exhibit its curative action in this respect.

CASE 1. A lady, about fifty years old, oppressed with gloom, of a saturnine complexion, suffered much from pain in her spine, at the nape of the neck, and the sacrum especially; at either of these places the pain was much increased by pressure. She had great difficulty in walking, and seemed threatened with paralysis of the lower limbs. She had a sensation of tremulousness, and uneasiness in the muscles of the neck.

Various means were resorted to for her relief, with little or no effect. Finally Angustura was prescribed and very materially relieved her. She is cheerful, the pain much less, and she walks with much more ease and comfort.

CASE 2. Another lady about the same age, was also threatened with paralysis of the lower limbs. There was considerable aggravation of her sufferings from a few doses of Angustura, followed by amelioration.

Lower Extremities.—Tremulous stitches in the left thigh, and in the upper border of the ilium, extremely painful, and felt only when sitting. (1.)

Clinical Remarks.—It seems to act less specifically upon the lower extremities than upon the upper. (11.)

A N I S E E D .

ANISE—ANISEED.

AUTHORITIES.

Trousseau and Pidoux (38) Wood and Bache (7.) Peters (11.)
Waring's Ther. (44.) Snelling (42.) Marcy (10.)

GENERAL REMARKS.

Aniseed is a native of Egypt, subsequently introduced into Spain and the Levant. It is also cultivated in the South of France. The fruit (seeds) alone is used, although the whole plant shares its me-

dicinal properties. The odor of the fruit is agreeable and quite pronounced; the taste is sweetish aromatic, and slightly hot and stimulating. The Spanish Anise is that most esteemed. It yields both a fixed and essential oil. (38.) The properties which depend upon this volatile oil, are imparted sparingly to boiling water, freely to alcohol. The volatile oil exists in the envelopes of the seeds, and is obtained separate by distillation. Their internal substance contains a bland fixed oil. (7.)

TOXICOLOGICAL EFFECTS.

A case of poisoning is on record from the accidental admixture of the fruits of *Conium-maculatum*, which bear some resemblance to those of Anise, but may be distinguished by their crenate or notched ridges. They are, moreover, broader in proportion to their length, and are generally separated into half fruits, while those of the Anise are whole. (7.)

Head.—Giddiness. Vague pains in the head.

Clinical Remarks.—It may be often given with advantage in head aches; especially those of nervous and hypochondriacal persons, and in those depending upon a depraved state of the alimentary canal. (38.)

Useful in giddiness arising from indigestion and flatulent distention of the stomach. Also for pain and pressure in the head from overloading the stomach. (10.)

Chest.—*Clinical Remarks.*—In Phthisis Dr. Prout is of opinion, that Aniseed has considerable power in allaying the irritation on which the cough depends. He simply infuses the bruised seeds in hot water. Dr. Watson says that he has tried this as a vehicle for Camphor, when the same dose in other vehicles has failed, and that it has frequently been followed by a marked abatement of the frequency and violence of the cough. (44.)

It is also stated that asthmatics are sometimes greatly relieved of their oppression by smoking the seeds of the Anise. (38.)

In consequence of the reputation of some remedies of this class it has been prescribed in acute chronic catarrhs, and in mucous fevers. (38.)

Mammæ.—*Clinical Remarks.*—We have seen nurses allay the colics of infants by themselves drinking a decoction of aniseed, and their milk certainly had a perceptible odor of anise. It has enjoyed a considerable reputation for increasing the secretion of milk, where it is deficient. This may be only through the digestive organs which are thus assisted. It is difficult, however, to account on these grounds for the very manifest increase of milk which often follows the application of cataplasms and fomentations of Aniseed to the breasts. (38.)

Stomach.—*Clinical Remarks.*—Its carminative and stomachic properties are well known. It is frequently used to assist digestion

after a meal, especially by hypochondriacal persons, and asthmatic patients frequently find through this a relief from the flatulence which torments them. (38.)

We have frequently seen nurses calm and allay the colics of infants by themselves drinking an infusion of Anise, and we are confident that the milk of the women had quite a perceptible odor of Aniseed. It has enjoyed quite a reputation for increasing the lacteal secretion. (38.)

Its principal range of use, however, is in those states of the primæ viæ marked by anorexia, dyspepsia, nausea, vomiting, &c., &c., appearing to depend upon an exaggerated or vitiated secretion from the pharyngeal and gastric mucous membranes, which are charged with a tough, transparent, viscid mucus, discharged with difficulty, and giving rise to spitting, heartburn and painful vomiting. (11.)

Urinary and Genital Organs. — *Clinical Remarks.* --- Hippocrates ascribes to it both emmenagogue and diuretic virtues ; he says, *Anisum vino maceratum bibendum propinato ad uterum expurgandum* ; and again, *confert Anisum et quæ urinam movent*. Galen confirms this observation : *urinam ciet, digerit et flatus reprimit*. (38.)

Anisum-Stellatum, (see *Illicium-Anisatum*.)

ANTHEMIS - COTULA.

CHAMOMILLA-FŒTIDA. MANZANILLA-LOCA.

Wild-Chamomile. May-Weed. Dry Chamomilla, Stinking Chamomile.

May-weed grows abundantly both in Europe and in the United States and is found in the vicinity of inhabited places, growing among rubbish, along the side of roads and in waste grounds. The whole plant has a strong, disagreeable smell and a warm bitter taste ; its disagreeable odor is an obstacle to its general use.

In Europe it is given in nervous diseases, especially hysteria, and is supposed like Assafœtida to possess antispasmodic and emmenagogue powers. It will vesicate, if applied fresh and bruised to the skin. The flowers are less disagreeable than the leaves.

Matricaria Chamomilla, (see *Chamomilla*.)

ANTHEMIS - NOBILIS.

ROMAN, OR COMMON CHAMOMILE.

GENERAL REMARKS.

All parts of the plant have medicinal properties, but it is only the flowers that are officinal. There are two varieties of flowers, the single and double; the single, or yellow are more odorous than the white or double, and more stimulant to the stomach, because the volatile oil upon which these properties depend, is much more abundant in the central or yellow florets.

The odor of Chamomile is fragrant and peculiar, the taste bitter, and warm and somewhat aromatic. The flowers contain a minute portion of Tannic-acid, a bitter principle and a volatile oil, upon which their medicinal virtues depend. On distillation they also yield a small quantity of a substance resembling *Valerianic-acid*.

In small doses, frequently repeated, it is said to be a mild tonic, operating like the simple bitters, but with a somewhat more excitant influence on the stomach, owing to its volatile oil. In large doses it is apt to prove emetic, more so than most other simple bitters.

Its relation to Valerian renders it carminative, emmenagogue, antispasmodic and somewhat anodyne.

Chamomile poultices applied to the ears are very useful in inflammatory ear-ache.

It has been used internally and externally against obstinate ulcers.

Fevers.—By the ancients it was used in the treatment of intermittent fevers and continued to be esteemed among the most valuable remedies in that complaint, down to the period of the discovery of Peruvian-bark. Even after that period, it long continued to retain some reputation as a febrifuge, being employed in cases which resisted the bark, and especially in the remission of remittent fevers, before the febrile phenomena had sufficiently subsided to justify the use of the more powerful remedy. In some cases, however, of intermittent and remittent fever, large draughts of warm Chamomile-tea given immediately before the paroxysm, the patient being kept warm in bed, will prevent the recurrence of the fever, either by operating as an emetic, or by a joint tonic and diaphoretic action.

Cullen cured many cases of fever and ague with it in powder-form—but it was apt to cause diarrhœa. It is mostly homœopathic when there is nausea, vomiting and diarrhœa.

In febrile and bilious diseases there is often a good deal of retching from the presence of acrid bile in the stomach, which may thus be promptly relieved.

It is much used in the convalescence from acute febrile diseases, and it is thought well adapted to those slight cases of debility, fre-

quently occurring, especially in sedentary females, in which stronger medicines might prove hurtful. In these cases the cold infusion, which is more acceptable to the palate and stomach, should be used.

Trousseau and Pidoux say, that it was the Peruvian-bark of the ancients. Galen says, the Magi of Egypt dedicated it to the sun, in consequence of its efficacy against fevers. Dioscorides recommends the powdered flowers to prevent an attack of fever and ague. Although it will not cure as many cases as Bark and Quinine, it will succeed at times, where these more powerful remedies fail; Trousseau and Pidoux explain this by stating that such patients have an idiosyncrasy against Bark and Quinine, and an idiosyncrasy in favor of Chamomilla. Homœopaths can easily learn to distinguish these cases. The celebrated R. Morton made comparisons between the effects of Bark and Chamomilla in fever and ague and often preferred the latter; one of his colleagues Elisha Coyth affirms that he has witnessed the signal efficacy of flowers of Chamomile very minutely and carefully pulverized, and regards it as certain as Bark itself. Morton recounts three cases in which he failed with Bark, but cured with Chamomilla; his testimony is the more important, as he was so well convinced of the general efficacy of Bark, that he never used other remedies unless this failed. F. Hoffmann preferred Chamomile to Peruvian-bark in substance. Schulz gives a case of quartan-fever which had resisted the most celebrated remedies for thirty-six months, cured by Chamomile. Pitcairn preferred it to Peruvian-bark. It is decreed to be most useful in vernal intermittents, occurring in large cities, and in nervous persons.

Stomach.—Although it is an emetic it is said to be particularly adapted to cases of general debility, in which the stomach participates in a greater degree than other organs. The gentle stimulant influence of its volatile oil on the stomach is said to render it peculiarly applicable under such circumstances.

In mild dyspepsia with defective appetite, flatulent eructations or slight colicky pains from wind in the stomach or bowels it is said to be often given with advantage.

It has already been stated that in large doses it is apt to cause vomiting; to produce this effect, it is best given in the form of warm infusion, and in large draughts, so as to aid the medicine by the nauseating effects of the tepid water. In this way it is often given with advantage in the dominant school and in domestic practice, in cases of spasm of the stomach arising from undigested food or other irritating matters in the stomach and attended with sensations of nausea, or ineffectual efforts to vomit. Indeed in any case of irritable stomach, when that organ seems unable wholly to free itself from its contents, it may be aided by large draughts of warm Chamomile-tea. The tea is often also administered along with other emetics, or shortly afterwards to promote their action, or to render it more easy, by giving the stomach a greater bulk to act upon.

Dierbach recommends it highly in spasmodic affections of the abdomen, in colicky pains, flatulence, painful menstruation, in hysterical and hypochondrical affections, in great nervous debility from excessive loss of semen, in diarrhœa and dysentery. The celebrated Baglivius regarded it as a specific against colic-pains; his words are: *Antidotum colicæ est chamomilla, a quacunque demum causa oriatur.*

Cullen says, its tendency to act upon the bowels renders it useful in colics and dysentery, but not in diarrhœa.

It has been used against the meteorism of malignant fevers, as a drink and injection.

N.B. The German Chamomile will be treated of under the head of Chamomilla, or Matricaria-Chamomilla.

A N T H E M I S - P Y R E T H R U M.

ANACYCLUS-PYRETHRUM—PELLITORY.

GENERAL REMARKS.

The plant is a native of Levant, Barbary and the Mediterranean coast of Europe. The root is the part used under the name of Pellitory of Spain.

Its taste is peculiar, slight at first, but afterwards acidulous, saline and acrid, attended with a burning and tingling sensation over the whole mouth and throat, which continues for some time and excites a copious flow of saliva.

It is a powerful irritant, and has been used almost exclusively in the dominant school as a siliagogue in certain forms of headache, rheumatic and neuralgic affections of the throat and toothache; or as a local stimulant in palsy of the tongue and throat, and in relaxation of the uvula. An alcoholic extract is sometimes used by dentists as a local application to carious teeth, with a view to its benumbing effects before plugging.

In homœopathic practice it may be used in mercurial salvation; in inflammations of the mouth, throat and gums.

A N T H R I S C U S - C E R E F O L I U M.

CHÆROPHYLLUM-SATIVUM.—SCANDIX-CEREFOLIUM.

Chervil.

AUTHORITIES.

Wood and Bache (7.)

GENERAL REMARKS.

An annual European plant, cultivated in gardens as a pot-herb, and supposed by some physicians to possess medicinal powers. It

has a strong agreeable odor, especially when rubbed, and a pungent slightly bitterish taste. These properties it owes to a volatile oil, which may be separated by distillation with water. It is said to be deobstruent, diuretic and emmenagogue, and has been recommended by different authors in consumption, scrofula, dropsy, cutaneous and scorbutic affections, and as an external application to swollen breasts, bruises, and other local complaints or injuries. It is, however, a very feeble medicine, and is more employed as an addition to broths than as a remedy. (7.)

A N T H R A K O K A L I.

STEINKOULEN-KALI.

AUTHORITIES.

Wood and Bache (7.) Dunglison (16.) Possart (70.) Peters (11.) Snelling (42.) Marcy (10.)

GENERAL REMARKS.

This preparation, introduced by Dr. Polya, is of two kinds, the simple and the sulphuretted. The simple Anthrakokali is formed by adding 160 parts of porphyzied mineral coal to 192 parts of a concentrated and boiling solution of caustic potassa, contained in an iron vessel, the whole being well stirred together. When the mixture is completed, the vessel is taken from the fire, and the stirring continued until the whole is converted into a homogeneous black powder.

The sulphuretted Anthrakokali is prepared in a similar manner, sixteen parts of Sulphur being mixed with the mineral-coal before it is added to the caustic potassa solution. Dr. Polya recommends these preparations both internally and externally, in scrofula, chronic rheumatism, rheumatic tumors of the joints, and certain herpetic affections. The dose is a grain and a half, three or four times a day, mixed with two or three times its weight of sugar, or powdered liquorice root. For external use sixteen grains may be rubbed up with an ounce of lard, to form an ointment, to be used by friction. (7.)

Polya affirms, that Anthrakokali exerts its influence on the skin generally, and especially on the chronic cutaneous affections. It has also been given beneficially by Felsach in scrofula and chronic rheumatism.

The dose of the simple and sulphuretted preparations employed by these physicians was gr. iss. three times a day.

M. Gibert employs it externally in chronic cutaneous affections, in the form of ointment. (16.)

In the Vienna general-hospital it was used in more than 800 cases, with very unsatisfactory results, although the remedy was persisted in

for two, three or even five months. Sigmund used the simple form in eleven cases of herpes without any benefit; the sulphuretted variety then cured only two of these cases. Clarus and Radius were equally unsuccessful in Leipzig. (11.)

It is highly probable that many of the phenomena attributed to this substance are referable to the Sulphur which it contains. Its marked effects as well as numerous individual symptoms upon the skin and other tissues, which Sulphur impresses specifically, lead to this conclusion. (10.)

S Y M P T O M S.

Head.—Headache. Cloudiness of the head. Heaviness of the head, accompanied by languor and restlessness.

Mouth.—Dry mouth. Bad taste in the mouth. Coated tongue.

Pharynx and Œsophagus.—Dryness of the pharynx. Heat from the fauces to the stomach. Burning in the pharynx, with slight dysphagia.

Appetite.—Want of appetite. Burning thirst. Rough, acrid, burning taste.

Stomach.—Feeling of heat in the stomach. Vomiting of black mucus and bile. Violent vomiting of green or yellow bile, accompanied with violent fever.

Abdomen.—Distention of the abdomen. Pain and rumbling in the bowels, with papescent, or dark stools. Colic with flatulence. Tympanitic distention of the abdomen.

Stool.—Blackish stools. Papescent stools, with pain and rumbling in the bowels. Bilious discharges with fever.

Urinary Organs.—Copious pale urine. Burning in the urethra, or itching at the orifice. Urine pale, offensive and having an alkaline reaction. Copious emission of pale urine, with earthy sediment adhering to the sides of the vessel.

Genital Organs.—Frequent erections. Burning or itching in the urethra, or at the orifice of the urethra. Menses appear too early.

Chest.—Oppression of the chest and violent palpitation of the heart, followed by sweat.

Extremities.—Sweat on the hands and feet, and in the axillas. Weary, bruised feeling in the limbs.

Sleep.—Sleeplessness, with general perspiration, rapid pulse, and great restlessness.

Fever.—Chills alternating with heat, followed by slight perspiration, and rapid pulse. General moisture of the skin, with hurried pulse, headache, restlessness, weary and bruised feeling. Violent fever, with vomiting of yellow or green bile, and with bilious stools. General night-sweats. Clammy morning-sweats. Sweats on particular parts.

Skin.—Pustulous pimples, like blotches, with violent itching, appearing in the night, and passing off again in the day-time. Chronic

erysipelas. Redness and heat of the skin, disappearing when the sweat appears. Burning and turgescence of the skin. Urticaria. General moisture of the skin, with rapid pulse, headache, restlessness, weary and bruised feeling.

General Symptoms.—Cutaneous troubles. Weak and bruised feeling in the limbs.

ANTIMONIUM - CRUDUM.

STIBIUM.

AUTHORITIES.

Wood and Bache (7.) Lancet (52.) Hahnemann (1.) Teste (36.) Marcy (10.)

GENERAL REMARKS.

Antimony as a medicinal or poisonous agent, seems to have been first supplied to the world by the alchymists towards the close of the fourteenth century. It was known to the Greeks and Romans under the name it maintains in chemical language, Stibium. Basil Valentine, a German monk, first drew attention to it as a therapeutic agent, lauding a preparation of it of his own invention, as a universal specific, but owing probably to the extent of this pretension, he did not succeed in establishing its claims. It was not until a century after this that the famous Paracelsus reintroduced Antimony into the medical world. But it was received with disfavor, and the parliament of Paris, deeming it a dangerous poison, passed a law against its use. It was finally entered in the State Register of medicine of Paris in 1637, under the head of "purgatives." (52.)

Metallic Antimony, sometimes called *Regulus of Antimony*, though not strictly officinal, has been lately incorporated into the U. S. Dispensatory. Antimony exists in nature, 1st, uncombined, 2d, as an oxide, 3d, as a tersulphuret, and 4th, as a sulphuretted oxide. It is found principally in France and Germany.

All the Antimony of commerce is extracted from the native tersulphuret, which is by far the most abundant ore of this metal. The ore is first separated from its gangue by fusion. It is then reduced to powder, and placed on the floor of a reverberatory furnace, where it is subjected to a gentle heat, being constantly stirred about with an iron rake. The heat should not be sufficient to cause fusion. This process of roasting is known to be completed when the matter is brought to the state of a dull greyish-white powder, called *Antimony-ash*. By this treatment the Antimony is partly teroxidized and partly converted into antimonious acid, while nearly all the sulphur is dissipated in the form of sulphurous-acid-gas, a portion of tersulphuret,

however, remains undecomposed. The matter is then mixed with tartar, or with charcoal impregnated with a concentrated solution of carbonate of soda, and the mixture heated in crucibles, placed in a melting furnace. The charcoal reduces the teroxide of Antimony, while the alkali unites with the undecomposed tersulphuret, and forms with it melted scoriæ, which cover the reduced metal, and diminish its loss by volatilization.

Antimony is imported into the United States principally from France, packed in casks. A portion is also shipped from Holland, from Trieste, and occasionally from Cadiz. The Spanish Antimony is generally in the form of pigs; the French in circular cakes of about two inches in diameter, flat on one side and convex on the other; and the English in cones. The French is most esteemed.

Antimonium-crudum then is the native tersulphuret, purified by a process of fusion; it passes also under the name of *Artificial-sulphuret of Antimony*. The crude Antimony as it occurs in commerce, is dark-grey externally, and exhibits internally, when broken, a brilliant steel-grey color, and a striated crystalline texture. Its goodness depends upon its compactness and weight, and the largeness and distinctness of the fibres.

It is entirely soluble in muriatic-acid, by the aid of heat, with the evolution of sulphuretted hydrogen. The muriatic solution when added to water, is decomposed with the production of a white powder, (oxychloride of Antimony).

Sulphuret of Antimony requires to be livigated in order to fit it for exhibition as a medicine, when it takes the name of *prepared sulphuret of antimony*.

Allopathic use of Antimony. This substance has been employed in medicine from a very early period. In the writings of Hippocrates, Galen, and Plinius, we find frequent allusion to it as a remedy in a great variety of maladies. It is one of many drugs which has been lauded by one generation of doctors, sneered at by the next, denounced as poisonous and totally unsafe by the next, revived again as a cure-all by the next, prohibited by legal enactments by the next, again and again revived and repudiated up to the present moment, when its advocates appear to be in the minority.

Among the diseases for which it has been empirically used, may be cited, various chronic cutaneous affections, scrofula, intermittent fevers, rheumatism, gout, chronic gastritis, dropsy, dysentery, marasmus, bronchitis, worms, scrofulous ophthalmia.

At the present time this preparation of Antimony is not employed by our empirical brethren. (10.)

GENERAL EFFECTS.

On the Nervous System.—Its action upon the ganglionic and true spinal-systems is not strongly pronounced, but from its pathogenesis we consider it a depressor of the nervous forces. This depressing

influence is due in part to a direct action upon the nervous system, and partly to its specific effect upon the stomach. When the latter influence is predominant, the reflex phenomena are first excitatory and afterwards depressing. (10.)

Nerves of Sensation.—It impairs to a slight extent the integrity of the nerves of sensation, and renders the prover somewhat indifferent to their ordinary stimuli. Thus, among its pathogenetic effects, we find numbness of the extremities when at rest. (10.)

Nerves of Motion.—Under its influence, the force of the entire muscular-system is impaired. Among its phenomena are, great lassitude, weariness, and actual diminution of muscular power. (10.)

Great Sympathetic Nerve.—From its effects upon the functions over which this system presides, we infer that here also it acts as a depressor. Under its influence, the action of the heart, and the respirations are diminished, and digestion is checked. (10.)

On the Mucous Membranes.—It operates specifically upon the mucous membrane of the respiratory apparatus, giving rise to augmented secretion of mucus, cough with itching and roughness of the affected parts, and hoarseness, and upon the mucous membrane of the stomach, causing nausea, flatulent distention, and vomiting of mucus, mixed with food. (10.)

Fever.—Quotidian and tertian fevers, with gastric symptoms, like want of appetite, eructations, loathing, nausea, vomiting, coated tongue, bitter taste, tension and pressure at the stomach, little thirst, pain in the chest. (1.) Much chilliness, and no heat. Shiverings along the spine, without thirst. Shiverings over the whole body, early in the morning, with heat in the forehead, without thirst. General sweat. Sweat during sleep. Gastric and bilious fevers. (1.) Quotidian or tertian fevers, with loathing, nausea, vomiting, cutting pain in the bowels and diarrhoea. (36.)

Clinical Remarks.—In imperfectly developed intermittent fevers, commencing with irregular shiverings along the back and on the body, without being followed by heat, thirst, or sweat, and accompanied by much gastric derangement, like nausea, loathing, and vomiting of mucous and partly digested food, and frequent eructations, this remedy often affords prompt benefit. A layman recently cured himself of the above group of symptoms, with a few doses of the 6th attenuation, repeated every two hours during the apyrexia. It is often servicable in certain stages of gastric fevers, after the more urgent symptoms have been subdued. (10.)

Skin.—Suppurating and long-continued eruption upon the cheeks. Cracks at the corners of the mouth. (36.) Blotches and vesicles, like stings of insects, on many parts of the body, especially in the face and in the joints of the extremities, coming on with itching and disappearing after a few hours. Pustules with red or brown scurfs, here and there. Itching of the whole body, especially the chest,

back, neck and limbs. Red vesicular pimples, like varicella, with stinging pain when pressed upon. Eruption resembling nettle-rash. (1.)

Clinical Remarks.—It has been most successfully employed in eruptions caused, or thrown out by gastric derangements. Also in pustular eruptions it is quite homœopathic and has often effected cures when used in high attenuations. We have often relieved the intense itching of porrigo, lichen, and eczema with the 30th attenuation, repeated at long intervals. (10.)

Mind and Disposition.—Loathing of life. Sadness, with weeping and impressibility. (36.) Ill-humor, depression of spirits, irritability, and aversion to talking. (1.)

Sensorium.—Weakness of the head. Aversion to mental effort. Taciturn and apathetic dementia. (1.)

Clinical Remarks.—In one case of stupid delirium, caused by the sudden disappearance of a nettle-rash, two doses of the 2d trituration of this medicine restored the rash, and cured the delirium. It is an appropriate remedy in delirium, nausea and vomiting, and other unpleasant symptoms arising from repelled measles, scarlet-rash, &c. (10.)

Head.—Rush of blood to the head. Gnawing pain on the top of the head, apparently in the periosteum. Fatiguing itching of the head, with falling off of the hair. (34.) Dull, stupefying pain in the whole head, with nausea in the pharynx and stomach, and sweat when walking in the open air. Continual burning pain in the forehead and temples, from within outwards. Headache as if her forehead would burst, with feeling of intoxication, and desire to be alone and taciturn. (1.)

Scalp.—Itching of the scalp, with falling off of the hair. (36.) Small, flat tubercles, here and there, upon the hairy scalp, of the size of small peas, painful to pressure, and with titillation all around. Red, hardened, and slightly elevated spots on each side of the forehead, itching like nettle-rash, going and coming. (1.)

Clinical Remarks.—It has been prescribed with great benefit, in chronic eczema of the scalp, characterized by frequent paroxysms of intense itching.

The ancients often employed it in scald-head, and occasionally with success. Although inferior to Rhus, Ledum, Sulphur, and this class of medicines, it certainly is worthy of consideration, in *crusta lactea*, *porrigo*, *lichen*, &c. (10.)

Eyes.—Redness and inflammation of the eye-lids. Chronic blepharophthalmia (of children). (36.) Redness of the eye-lids, with fine stitches in the eye-ball. Redness of the left eye, with dread of light on rising in the morning, and with secretion of mucus in the inner canthus. Red, inflamed eyes, with itching and nightly agglutination. Inflammation of the eyes. Rheumatic ophthalmia. (1.)

Ears.—Redness, burning and swelling of the ears, as from mosquito-bites. Swelling and redness of the whole internal canthus, with periodical itching. Continual roaring in the ears, especially when all is still, and worse in the afternoon. Painful roaring in the ears. Impaired hearing. (1.)

Clinical Remarks.—It is homœopathic to slight eruptions around, and within the ears of children, accompanied by occasional turns of itching. (10.)

Nose.—Crusts and cracks of the nostrils. Stuffing of the nose. (36.) Stoppage of the nose, particularly in the evening. Dry coryza. Fluent coryza, particularly in the morning. Bleeding of the nose for several days in succession. Both nostrils become chapped and covered with crusts. Sore nostril, with drawing pain. Feeling of soreness and obstruction of the nostrils when inspiring air. (1.)

Clinical Remarks.—In several instances we have seen sore nostrils, with frequent accumulation of crusts, cured by the use of a high attenuation of this drug (10.)

Face.—Suppurating and long-lasting eruption upon the cheeks. Cracks at the corner of the mouth. (36.) Dry lips. Sore and painful cracks at the corners of the mouth, returning after five, eight and twelve weeks. Red, burning, suppurating eruptions on the face. Red pimples, with pus at the tips, on both sides of the nose, painful to pressure. Flat pimples on the cheeks, not red, itching when touched, with a yellowish scurf. Rash on the face resembling nettlerash. (1.)

Clinical Remarks.—It is most homœopathic in chronic pustular eruptions upon the face, running into crusts, and causing a painful soreness of the affected parts. According to our own experience, the higher attenuations are far more efficacious in these cases, than cruder doses. (10.)

Teeth and Jaws.—Gnawing pain in carious teeth, after every meal. (36.) Tooth-ache in a hollow tooth, worse at night than in the daytime. Profuse bleeding of the gums. Shooting toothache, in the evening when in bed, and after dinner. Stitches in the tooth when inspiring air. Toothache is renewed after eating—is aggravated by applying cold water, and is relieved in the open air. (1.)

Mouth.—Cracks at the corners of the mouth. (36.) Violent pyralism from the nose and mouth. Sensation of scraping (rawness) in the velum palati, with much phlegm upon it, which could only be expelled by long hawking. White coat upon the tongue in the forenoon. Bad breath, with sore throat and impeded deglutition. (1.)

Taste and Appetite.—Loss of appetite for a long time. Eructations tasting of ingesta. Loathing, nausea, and desire to vomit. (36.) Violent thirst, with dryness of the lips. Thirst in the evening. Cutting colic, with loss of appetite. (1.)

Gastric Symptoms.—Habitual sensation in the stomach as if overloaded. Constant eructations of wind. Bread and pastry particularly occasion nausea, and cutting colic. Aggravation of gastric symptoms by wine, even when diluted with water. (56.) Bitter eructations like bile. Gulping up of a fluid which tastes of the ingesta, in the afternoon. Nausea after a glass of wine. Persistent and severe nausea, and vomiting. Vomiting and diarrhœa. (1.)

Clinical Remarks.—It is a most appropriate remedy in chronic gastritis, characterized by frequent attacks of nausea and vomiting, eructations with taste of the food last taken, great thirst, especially during the night, white coat upon the tongue, loss of appetite, flatulency, and griping pains in the bowels. It rarely fails to relieve this group of symptoms. It is also homœopathic to obstinate nausea and vomiting occurring after the sudden disappearance of some cutaneous eruption. (10.)

Stomach.—Stomach feels as if overloaded. (36.) Cramp-like pains in the stomach. Pain at the stomach as from excessive fullness, with appetite. Cramp of the stomach. Painfulness of the stomach on pressure. Tension and pressure at the pit of the stomach. (1.)

Abdomen.—Cutting colic, with loss of appetite. Flatulent discharge from the bowels. Cutting in the bowels and diarrhœa. (36.) Distention of the abdomen after eating. Cutting in the bowels, with nausea and accumulation of water in the mouth. Pinching pains in different parts of the abdomen, with sense of tension in the hypochondrium.

Clinical Remarks.—An excellent remedy in dyspeptic conditions characterized by distention of the abdomen after eating, occasional cutting or pinching pains, diarrhœa, nausea, water-brash, sense of tension over the abdomen and stomach, loss of appetite, and frequent flatulent discharges from the bowels. (10.)

Stool.—Alternate diarrhœa and constipation. Hard, difficult stool. Constant secretion of a yellowish-white mucus at the anus. Cutting pains in the bowels and diarrhœa. (36.) Hard, difficult stool, with or without tenesmus. Disposition to diarrhœa which does not take place. Liquid stool. Discharge of mucus from the rectum, with emission of flatulence. Much flatulence soon after eating. (1.)

Urinary Organs.—Frequent and profuse emission of urine. Chronic catarrh of the bladder. (36.) Brown urine. Dark-red urine. Frequent micturition, with discharge of much mucus, and burning of the urethra, with pain in the small of the back. Cutting during micturition. (1.)

Clinical Remarks.—In the days of Paracelsus, it was used as a remedy in gonorrhœa, and dropsical affections. From its pathogenesis, it is evident that it bears very slightly upon the urethra, bladder, and kidneys, but the symptoms are not sufficiently positive to render it an important drug, in these maladies. Whatever good

results might have been produced in these cases by the ancients, were probably due to its general antiphlogistic properties, rather than to any direct specific local operation. (10.)

Sexual Organs.—Irritation at the extremity of the urethra. Nocturnal emissions, with dreams, also without dreams. Pressure in the womb as if something would come out. Discharge of an acrid fluid from the vagina. (1.)

Larynx and Trachea.—Chronic angina, with sensation as if a foreign body had lodged in the throat, which gives rise to a constant desire to swallow. (36.) Roughness and dryness in the throat, early in the morning. Extreme feebleness of voice. Loss of voice whenever he became hot, returning by rest. Constant hawking of yellowish mucus from the posterior nares. Frequent dry cough. Severe, dry cough with a sense of scraping in the larynx. Cough with discharge of viscid, thin phlegm. (1.)

Clinical Remarks.—It is appropriate in dry, morning-coughs, with scanty and difficult expectoration, hoarseness, and scraping in the larynx, and bronchi. It is also homœopathic to bronchial catarrh, with great feebleness of voice, and severe morning-paroxysms of cough. (10.)

Chest.—Cough and oppression on the chest. (36.) Violent and continual itching of the chest, the whole day. Burning in the chest when coughing. Suffocative catarrh. Oppression of the chest early on waking. Deep, sighing breathing, as from fullness of the chest, for several days, in the afternoon and after dinner. (1.)

Back.—Rheumatic pains in the back of the neck and loins. (36.) Pain in the small of the back, during the day. Violent itching of the back for a fortnight. Violent pain in the small of the back when rising from a chair, or from bed. Red vesicles over the shoulders. (1.)

Clinical Remarks.—For rheumatic pains of the back, shoulders, and extremities, this medicine deserves some consideration. Its homœopathicity in these cases, is not strongly marked; but as several eminent physicians of our own school have used it with benefit, and Hoffmann, Kunckel, and Hermann of the other school deem it an important remedy in both rheumatic and gouty pains, it is worthy of trial. It is quite probable that Antimonium-crudum, like Antimonium-tartaricum, relieves these pains by its general anti-inflammatory action, rather than by any direct specific operation upon the affected parts. (10.)

Upper Extremities.—Painful inflammation of the tendons of the arm and hand, and of the elbow, with intense redness, and contraction of the arm. Arthritic pains in the fingers. (36.) Drawing pains in the fingers and their joints. Painful lameness of the muscles of the upper arms, when bending them, as if they were too much contracted, or weakened by this contraction. Quivering drawing in the muscles

of the upper arms, passing off by warmth, and returning in a draft of air. (1.)

Lower Extremities.—Numbness of the legs during rest and while sitting. Pulling pains in the lower limbs. Callosities on the soles of the feet. (36.) Drawing pains in the hip-joints, when walking, especially when moving the thighs from before backwards. White, hard itching tubercles on the legs, of the size of a small pea, and surrounded by a small red circle. Stiffness of the knees. Painful stiffness of the knees. Drawing pains in the legs as far as the knees. (1.)

Clinical Remarks.—When gouty or rheumatic pains of the extremities are accompanied with much stiffness, nausea, and white coated tongue, Hering advises this medicine. Noack and Trinks commend it in acute gout of the limbs, with prominent gastric derangement. Our own experience with it in these complaints is quite unsatisfactory. (10.)

Sleep.—Great sleepiness during the day, and early in the morning after waking,—with great indisposition to leave the bed. In the evening she feels overwhelmed with sleep. He falls asleep late. Uneasy sleep at night on account of itching stitches here and there, going off by rubbing. Frequently roused from sleep by an intolerable itching of the chest, where he felt pimples. He wakes in the night, with a general sense of warmth, burning itching, and sensation of excoriation of the anus. Sleep disturbed by disagreeable dreams. (1.)

Clinical Remarks.—It is particularly indicated in great drowsiness on waking in the morning, and during the day, accompanied by gastric and bilious derangements. In restless and disturbed sleep arising from chronic gastritis, it sometimes affords relief. It is also appropriate in drowsy, stupid conditions occurring during the course of acute eruptive maladies, especially when nausea, vomiting, eructations, and other gastric symptoms have been present. (10.)

General Symptoms.—Gastric derangements. Rheumatic and arthritic inflammation of the neck, back, and extremities. Emaciation and exhaustion. Catarrhal and bronchial difficulties.

Characteristic Peculiarities.—Symptoms aggravated by wine, bread and pastry. He feels better when at rest, and in cool air. Symptoms apt to reappear after the third week.

ANTIMONIUM-TARTARICUM.

TARTAR-EMETIC.

Tartrate of Antimony and Potassa. Tartarized Antimony.

AUTHORITIES.

Wood and Bache (7.) Christison (9.) London Lancet (52.)
Jahr (32.) British Journal of Hom. (12.) Waring's Therapeutics (44.)
American Journal of Med. Sci. (17.) Marcy (10.) Peters (11.)
Fullgraff (26.) Snelling (46.) Frank's Mag. (4.)

GENERAL REMARKS.

Tartrate of Antimony and Potassa was discovered in 1631, by Adrian de Mynsicht. It consists of two equivalents of Tartaric-acid, 132, one of potassa, 47.2, one of teroxide of Antimony, 153, and three of water $27=359.2$. It is evident that it contains Tartaric-acid and potassa in the precise proportion to form bitartrate of potassa, or cream of tartar, and consequently it may be viewed as a compound of one eq. of cream of tartar, and one of antimonial teroxide. The excess of acid in the bitartrate may be considered as united with the teroxide; and on this view it is a double salt, composed of the tartrate of potassa, united with the tartrate of teroxide of Antimony. It is in the form of transparent colorless crystals, which possess a nauseous metallic styptic taste, and have usually the form of rhombic-octohedrons, unless prepared from the oxychloride, when it crystallizes in tetrahedrons. (7.)

It is a combination of the oxychloride of Antimony and cream of Tartar.

The physiological facts which we at the present time possess, regarding the effects of Antimony, are very limited. Pereira sums them up in his peculiarly comprehensive and masterly style. Herbivorous animals, it would seem, bear larger doses than those which are carnivorous or omnivorous. Magendie found that Tartar-emetic produced the same effects when thrown into the veins, as it did when given by the stomach. He considered that its chief action was confined to the intestinal canal and lungs. Traces of pneumonia, gastritis and enteritis were found after death. Rayer, Bonnet and Campbell found no such lesions of the lungs. (9.)

TOXICOLOGICAL EFFECTS.

There is little peculiarity in what is hitherto known of the symptoms of poisoning with Tartar-emetic in man. Cases in which it has been taken to the requisite extent are rarely met with: and it has seldom remained long enough in the stomach to act deleteriously.

But its action on animals would appear from the experiments of Magendie to be somewhat peculiar.

He found that dogs, like man, may take a large dose with impunity, for instance half an ounce, if they are allowed to vomit; but that if the gullet is tied, from four to eight grains will kill them in a few hours. His subsequent experiments go to prove that death is owing to the poison *exciting inflammation in the lungs*.

CASE 1.—Six or eight grains dissolved in water were injected into a vein; the animal was attacked with vomiting and purging and died within an hour. *Post-mortem appearances*, redness of the whole villosous coat of the stomach and intestines, and also *the lungs were of an orange-red, or violet color throughout, destitute of crepitation, gorged with blood, dense like the spleen, and here and there even hepatized*. A larger quantity caused death more rapidly without affecting the alimentary canal; a smaller quantity caused intense inflammation there and death in twenty-four hours, *but the lungs were always more or less affected*.

It is a fact too, worthy of notice that in whatever way this poison enters the body its effects are nearly the same. This is shown not only by the researches of Magendie just mentioned, but likewise by the experiments of Schläpfer, who found that a scruple dissolved in twelve parts of water, and injected into the windpipe, caused violent vomiting, difficult breathing, and death in three days; and in the dead body both the lungs and stomach were much inflamed, particularly the former.

It further appears from an experiment related by Dr. Campbell, that, when applied to a wound, it acts with almost equal energy, as when injected into a vein.

Five grains killed a cat in this way in three hours, causing inflammation of the wound, and vivid redness of the stomach. He did not find the lungs inflamed.

Magendie infers from his own researches, that Tartar-emetic occasions death when swallowed, not by inflaming the stomach *but through means of a GENERAL INFLAMMATORY state of the whole system* subsequent to its absorption,—of which disorder the affection of the stomach and even that of the lungs are merely parts or symptoms. The later experiments of Rayer tend in some measure to confirm these views, by showing that death may occur without inflammation of any kind being excited anywhere. (See physiological effects.)

Orfila has proved by analysis the important fact that Tartar-emetic is absorbed in the course of its action, and may be detected in the animal tissues and secretions. He found that when it is applied to the cellular tissue of small dogs, two grains disappear before death; that Antimony may be detected by his process throughout the soft textures generally, but especially in the liver and kidneys; but that it is quickly discharged from these quarters by the urine.

Hence in an animal that died in four hours, he found it abundantly in the liver and still more in the urine; in one that survived seven-

teen hours, the liver presented mere traces of the poison, but the urine contained it in abundance, and in one that livid thirty-six hours, there was a large quantity in the urine but none at all in the liver.

He also found that Antimony is to be found in the urine of persons who are taking Tartar-emetic continuously in large doses for pneumonia.

Where Tartar-emetic is swallowed by man, it generally causes vomiting very soon and is all discharged; and then no other effect follows. But if it remains long in the stomach before it excites vomiting or if the dose be large, more permanent symptoms are sometimes induced. The vomiting recurs frequently and is attended with burning pain at the pit of the stomach, and followed by purging and colic pains. There is sometimes a sense of tightness in the throat, which may be so great as to prevent swallowing. The patient is likewise tormented with violent cramps. Among the cases hitherto recorded, no notice is taken of pulmonary symptoms, which might be expected to occur if Magendie's experiments are free of fallacy. (9.)

TARTAR-EMETIC IN LARGE DOSES.

The late introduction of large doses of Tartar-emetic into the practice of the old school, having excited some doubt as to its poisonous qualities, it becomes a matter of some moment to possess positive facts upon the subject. The following cases may therefore be noted, which will satisfy every one that this substance is sometimes an active irritant.

CASE 2.—This case occurred in consequence of an apothecary having sold Tartar-emetic by mistake for Cream of Tartar. The quantity taken was about a scruple. A few moments afterwards the patient complained of pain in the stomach, then of a tendency to faint—and at length was seized with violent bilious vomiting. Soon after that he felt colic pains, extending through the bowels, and accompanied ere long with profuse and unceasing diarrhœa. The pulse at the time was small, and contracted, and his strength failed completely; but the symptom which distressed him most was frequent rending cramps in the legs. He remained in this state for about six hours, and then recovered gradually under the use of Cinchona and Opium; but for some time afterwards he was liable to weakness of digestion.

CASE 3.—This case, where the dose was forty grains, proved fatal, although the person vomited soon after taking it. The symptoms illustrate well the narcotico-acrid action often observed in animals. The poison was taken voluntarily. Before the person was seen by M. Recamier, who relates the case, he had been nearly two days ill with vomiting, purging and convulsions. On the third day he had great pain and tension in the region of the stomach, and appeared like a man in a state of intoxication. In the course of the day the whole belly became swelled, and at night *delirium super-*

vened, and next with an aggravation of the symptoms, the *delirium became furious*, followed by convulsions and he finally died during the night.

CASE 4. Severe effects have also been caused by so small a dose as six grains. A woman who swallowed this quantity, wrapped in paper, was seized in half an hour with violent vomiting, which soon became bloody. In two hours the decoction of cinchona was administered with much relief. But she had severe colic, diarrhœa, pain in the stomach, and *some fever*; of which symptoms she was not completely cured for five days.

CASE 5. Another case has been published where a dose of four grains caused pain, vomiting and purging, followed by convulsions, failure of the pulse, and loss of speech; recovery took place very slowly. (9.)

OF LARGE DOSES.

While these examples prove that Tartar-emetic is occasionally an irritant poison in doses of a scruple or less, it must at the same time be admitted that it is uncertain in its action as a poison. This appears from its late employment in large doses in inflammation of the lungs. The administration of Tartar-emetic in large doses, was a common enough practice so early as the seventeenth century and was also occasionally resorted to by physicians between that and the present time. But it is only of late years, that by the recommendations of Rasori and Laennec that it has again become a general practice. According to this method Tartar-emetic is given to the extent of twelve, twenty, or even thirty grains a day in divided doses; and not only without producing any dangerous irritation of the alimentary canal, but even also not unfrequently without *any physiological effect whatever*.

Doubts were at one time entertained of the accuracy of these statements of the continental physicians; but these doubts are now dispelled, as the same practice has been tried in Britain. Rasori ascribed the power the body possesses of enduring large doses of Tartar-emetic without injury, to a peculiar diathesis which accompanies the disease, and ceases always with it. And it is said that the same patients who, while the disorder continues, may take large doses with impunity, are affected in the usual manner, if the doses are not rapidly lessened, after the disease has begun to give way. The testimony of Laennec on the subject is impartial and decisive. He observes he has given as much as two grains and a half every two hours until twenty grains had been taken daily, and once gave forty grains in twenty-four hours by mistake; that he never saw any harm result; and that vomiting or diarrhœa were seldom produced, and never after the first day. The power of endurance he found to diminish, but not as Rasori alleges, to cease altogether, when the fever ceases, for some of his patients took six, twelve, or eighteen grains

daily when in full convalescence. Christison's observations correspond with Laennec's, except as to the effects of large doses during convalescence, of which effects he has no experience. He has seen from six to twenty grains, given daily in several doses of one or two grains, check bad cases of pneumonia or bronchitis, without causing vomiting or purging after the first day, and also without increasing the perspiration. At the same time he states that he has twice seen the first two or three doses excite so violent a purging and pain in the stomach and bowels, that he was deterred from persevering with the remedy. But in continued fever he has repeatedly found that the doses mentioned above did not cause any symptoms of irritation in the stomach or intestines.

The large quantities mentioned have even been given in a single dose, without greater physiological effects. Christie has given a scruple in one dose, in cholera, with the effect merely of exciting some vomiting and several watery stools. But he states that *in one case symptoms were induced like those of a case of violent cholera.* (9.) (See "Stool.")

The leading features, indeed, in every case of poisoning with preparations of antimony are vomiting, purging, spasms; symptoms in a word, analogous to those of cholera. (52.)

The same large doses have been given by some in delirium tremens, without any poisonous effect being produced. A correspondent of the Lancet has even mentioned that on one occasion after gradually increasing the dose, he at last wound up the treatment, successfully as regarded the disease, and without any injury to the patient, *by giving four doses of twenty grains each, in the course of twenty minutes.* (9.)

Prof. Forget of Strasburg, gave Tartar-etic to a robust man laboring under acute articular rheumatism, first in eight grain doses, then in doses of 10. 15. 20. 30. 40. 60. and lastly 72 grains, without any disorder of the intestinal canal or general disturbance. In three days he took ten drachms! He was relieved for a time, but a relapse occurred, and he was finally cured by Colchicum. (44.)

These facts are peculiarly perplexing when viewed in connection with its great activity as a poison in comparatively minute doses, in some well authenticated cases. Christison after a recapitulation of the facts, draws the conclusion that the substance is not so active a poison as was till lately supposed, though uncertain in its action; but it is probable that in connection with this there is an idiosyncratic tolerance of the mineral in many constitutions, and more especially in certain diseases, upon which this apparent immunity greatly depends. Christison thinks that *in general* we may anticipate violent effects from a large dose. (46.)

The following case of poisoning resulted from a smaller dose than any yet mentioned and displays convincingly the very energetic action of the remedy in some cases.

CASE 6. The patient was a delicate, strumous man, suffering from

pneumonia, (first stage,) with pleuritis on right side : Stethoscopic indications well marked ; intense pain in the chest, great difficulty in inspiration, and general symptoms of inflammatory fever. Bleeding affording no relief, a pill was prescribed of calomel and opium, "and a mixture containing a free dose of Tartar-emetic, viz., one-third of a grain, to be taken every four hours." About half an hour after the first dose the patient became restless, cold and faint, then purged and vomited, the symptoms continuing violently without cessation. For the time the pain in the chest was gone and the breathing free, but vomiting, purging and prostration extreme ; pulse small, surface cold, legs cramped. In fact it was a case *strictly analogous with Asiatic-cholera*, but the cause, plainly enough, was an over-dose of Tartar-emetic. Opiates and brandy effected a speedy cure. As the mixture contained in all three grains of Tartar-emetic, and its solution was not complete, in consequence of a want of care in its preparation, the patient may have got a larger dose, but probably not over $1\frac{1}{2}$ to 2 grains. (52.)

CASE 7. Was produced by yet a smaller dose, and occurred in the case of a stout active well built man, who applied for relief for a cold, remarking at the same time that caution was requisite, if an antimonial should be prescribed, as he was peculiarly sensitive to the action of that substance. A diaphoretic being deemed necessary, fifteen minims of wine of antimony were ordered to be taken at bed-time. There was no mistake in the dose, as the prescriber saw it dispensed and knew the wine to be of the proper strength. The dose was taken, and the symptoms that followed were very severe, and such as no medical practitioner would be prepared for under such circumstances. The nausea was incessant for many hours, and the prostration so great as to render the patient unable to leave his room for three or four days. There was no purging, but abdominal pain, griping, faintness and general exhaustion. (52.)

The fact has also been developed during the recent poisoning investigations in England, that in Bolton, England, the druggists are in the habit of vending powder of tartarized Antimony under the name of "quietness" or "quietners," containing four grains of Tartar-emetic, to women with drunken husbands, with simply the verbal directions to divide the powder into four equal parts, each one of which is considered a dose. This has given rise to a trial on suspicion of poisoning, on which, although the woman was acquitted, it was fully proved that the Antimony was administered, and that the effects followed the dose. The case was as follows:

CASE 8. The deceased was an operative cotton spinner, and subject to periodical outbreaks of drinking every two or three months ; otherwise temperate. While in his usual health and not under the influence of liquor, he was seized with pain about the region of the stomach, followed next day by a burning sensation, which was treated by his physician as dyspepsia. He had suffered from similar symptoms on previous occasions. He gradually became worse, complaining of

sickness, constant inclination to vomit, and in addition burning heat and great prostration of strength. Suspicions of poisoning being awakened he was guarded against a repetition of the dose, but it was too late. The symptoms increased in severity, and he ultimately died from pure exhaustion.

PATHOLOGY.—Body emaciated ; extensive adhesions of the pleura : the lungs were natural in weight and size : but the left of the lower lobe was congested ; the stomach was inflamed, particularly next the heart : the duodenum was inflamed, as were all the small intestines : the upper part of the rectum contained hardened fæces : the right kidney was congested ; the bladder was inflamed ; the rest of the body was in a healthy condition : the liver was healthy, but congested. There was no purging or cramps in this case, which gave rise to some doubts as to the death being caused by antimony, but otherwise the symptoms all indicated it.

As in the case of mercurial leaden and cupreous impregnation of the system, there is likewise an antimonial sign which is perfectly pathognomic. It is indicated in all these substances by the state of the gums and teeth, but that of copper and antimony have not been so fully described. In copper impregnation it is not so much the free margin of the gum, as the parts of the gum next the teeth, which are coated with gum sordes ; whilst in antimonial impregnation it is not the teeth, but the whole surface of the gums, both within and without, that assumes the appearance of the brightest pink velvet, with a raised pile. (52.)

CASE 9. This appearance was particularly well marked in the case of a chemist's assistant, who was under treatment with James' powder for broncho-pneumonia. After taking about one drachm of James' powder in five grain doses in three days, the above appearance of the gums was noticed, accompanied by severe prostration. The patient had been getting two grains of camphor with every five of James' powders. The antimony was discontinued, and a good recovery obtained under the use of the *polygala senega* root. (52.)

CASE 10. Precisely the same appearance was observed in the case of a tin-plate-worker, whose principal complaint was of extreme prostration. The strength returned in both these last cases as the gums became healthy. (52.)

CASE 11. Dr. Richardson instituted another experiment on a dog by the inhalation of Antimonuretted Hydrogen Gas which proved fatal in three hours and forty-five minutes. There was both purging and vomiting. The breathing generally outlasts the heart's action ; the respiratory system being the ultimum moriens.

PATHOLOGY.—As before great congestion of all the viscera, and of the blood vessels. Blood as before loosely coagulated. Lungs inflated and full of blood. Bronchial surface pale and coated with a frothy mucus. Both sides of the heart full of blood. Brain, liver and kidneys congested. On larger curvature of stomach as before, was the same sort of redness marked out much in a similar manner.

CASE 12. Dr. Janonich dissolved twelve grains in four ounces of fluid, as an experiment, and took tablespoonful doses every four hours; after the first dose he experienced vertigo and nausea; after the second, shivering over the whole body, cold sweat, nausea, and retching to vomiting; after the third, great præcordial anxiety and oppression, two attacks of vomiting of much mucus and bile, rumbling in the bowels without pain or diarrhœa; profuse and constant perspiration, abundant flow of saliva and thirst; at the fourth dose, frequent nausea, vomiting and one stool; after the fifth, such a state of apathy that he was indifferent to life or death, and his pulse became quite slow, there was no burning or pain in the stomach or bowels, but he felt such a repugnance to the remedy that he could not take any more; much rumbling in the bowels was followed by another stool, and the nausea, perspiration, lassitude and apathy continued for many hours; the next day, he was comparatively well. (4.)

CASE 13. Twenty to twenty-five grains of Tartar-emetic were taken by mistake; in a few minutes there was an insufferable feeling of warmth in the epigastrium, then violent pain in the forehead like *clavus hystericus* and some dizziness; in half an hour moisture in the forehead and nape; vomiting for twenty or thirty minutes; the headache, dizziness and redness of face increased; Castor-oil caused a return of vomiting, eructations, and ejection of bilious matters; the burning feeling in the stomach and small bowels increased to such a degree that he became very restless; the pulse weak and 80, tongue white, throat dry, taste unpleasant; inclination to sleep. A gentle purgative relieved the nausea, and he slept for an hour; some vertigo and a slight feeling of warmth in the stomach remained. On the next day his mouth was very sensitive, the gums bled, with a slight spongy appearance like scurvy, lasting two days. (4.)

ON THE MUCOUS TISSUE.

There is some reason to suppose that the vapors of antimony may prove injurious when inhaled.

CASE 14. Four persons, constantly exposed in preparing antimonial compounds, to the fumes of antimonious acid and chloride of antimony, were attacked with headache, difficult breathing, stitches in the sides and back, difficult expectoration of viscid mucus, want of sleep and appetite, mucous discharges from the urethra, loss of sexual propensity, atrophy of the testicles, and a pustular eruption on various parts, especially the scrotum. (9.) Froriep relates that it has produced pustules in the mouth, throat and fauces, identical with the small-pox pustule, even to the depression in the centre, and regards it as a distinct indication of its homœopathicity to small-pox and varioloid.

Whether taken in large doses, or in very minute doses long continued, it produces inflammation of the buccal cavity, of the veil of

the palate, and of the pharynx. The mucous membrane of these parts is not only found red and swollen, but dotted here and there with excoriations, and vesicles. From the symptomatic indications derived from its operation upon the pulmonary apparatus, it is evident that it also produces a similar condition of the mucous membrane of these parts. It produces redness and inflammation of the stomach, but according to Majendie this should be referred to the specific influence which it exerts over the stomach, independent of its direct local irritation. This specific influence will manifest itself promptly, if the Stibium in solution be injected into the veins. Inflammation of the intestinal mucous membrane is another effect of large doses of this substance. (10.)

T H R O A T .

CASE 15. A delicate man, with severe bronchitis, took ten grains of Tartar-emetic dissolved in seven ounces of water in the course of one day; his chest-symptoms were considerably ameliorated thereby, but a very intense *angina* set in at once. The whole mouth, together with lips, became *as much swollen as in excessive mercurial salivation*; the tongue became bright red and dry in the middle; the soft palate and pharynx were equally intensely reddened and covered with vesicles or pustules, some of which burst open, and the whole of these parts were so swollen and glued with tough mucus that the suffering patient could not swallow even the smallest portion of drink, and his breathing was also much impeded; this state was attended with great fever and some nocturnal delirium; no vomiting or purging were produced. Frequent gargling with a warm decoction of oat-meal effected some relief. (4.)

DERMOID TISSUE OR THE SKIN.

The effects of Tartar-emetic on the skin are worthy of notice; but they have not yet been carefully studied. Some facts tend to show that even its constitutional action may be developed through the sound skin. Mr. Sherwen attempted to prove by experiments on himself and two pupils, that five or seven grains in solution will, when rubbed on the palms, produce in a few hours nausea and copious perspiration. His observations have been confirmed by Mr. Hutchinson. But Savary, on repeating these experiments, could remark nothing more than a faint flat taste and slight salivation. Sometimes it has appeared to cause severe symptoms of irritant poisoning when applied externally to excite a pustular eruption, and even death.

CASE 16. In the case of an infant two years old, soon after its spine had been rubbed with an antimonial ointment, it was seized with great sickness, and frequent fainting, which in forty-eight hours, proved fatal. (52.) This, however, is probably an exceptional case, as the constant use of a similar application, is unattended with any ill consequences. (46.)

Clinical Remarks.—Although its constitutional action is not often developed through the sound skin, its *local* effects are unequivocal and severe. When applied to the skin it does not corrode, but excites inflammation, on which account it is much used in place of cantharides. It does not blister, but after being a few days applied, it brings out a number of painful pustules; if it be persevered in, the skin ulcerates; and if it be applied to an ulcerated surface, it causes profuse suppuration or even sloughing. (9.)

CASE 17. Some years since a girl was admitted to one of the provincial hospitals with an anomalous pain of the shoulder blade. Tartar-emetic ointment was used once or twice rather freely: the consequence was, a large crop of pustules, which healed and broke out again and again, without any further application of the ointment. This continued uninterruptedly for three or four months, until the surgeon looked upon the remedy as worse than the disease; and the case was lost sight of as incurable. This would seem to prove its *local* absorption and elimination for an indefinite length of time. (52.)

Its peculiar property of exciting a pustular eruption may also sometimes be displayed after its internal administration.

CASE 18. An Essex farmer had been taking the Tartar-emetic for six days in half-grain doses, every three hours, while suffering under acute pneumonia. The characteristic eruption made its appearance over the whole body, the patient was so well covered with pustules, that the friends of the patient mistook the eruption for small pox; a natural error. (52.)

CASE 19. Dr. Böckh, of Greifenhagen, ordered a fisherman to take two grains of Tartar-emetic in solution in the course of thirty-six hours, for the cure of pneumonia. Scarcely twenty-four hours after the last dose there appeared an eruption exactly resembling that caused by the external application of the salt. It consisted of small papulæ or vesicles, which rapidly enlarged and became full of pus, and of a deep red color at the base, *resembling mature variolous pustules*. In the course of a few days they became dry and crusted at the top. The eruption appeared first on the inner surface of the forearm, then over the whole back, where the pustules were partly solitary, partly grouped. Neither vomiting nor sweat attended the formation of the pustules, but they were preceded by some watery stools. The cure of the pneumonia advanced most satisfactorily. (12.)

Clinical Remarks.—When the medicine has purged Dr. Richardson thinks he has usually observed that the skin was dry, and thinks that the absence of diaphoresis was probably the cause of the catharsis. (52.)

CASE 20. A man with pneumonia took ten grains of Tartar-emetic in solution in thirty-four hours; about twenty-four hours after the last dose an *eruption* appeared which resembled in the closest particulars

that produced by Tartar-emetic ointment; it consisted of pimples and vesicles which increased rapidly in size and filled with pus in two days; they were surrounded with a red base and *resembled closely mature pustules of small-pox or smaller pustules of cow-pox*. They were exceedingly painful, but most of them dried up in a few days and formed crusts; a few became longer than the others and then *resembled the pustules of Ecthyma*. The eruption commenced on the inner surface of the right forearm, then spread over the whole back, where the pustules were both isolated, grouped, and confluent. Neither vomiting, purging, or perspiration was caused by the drug. The pneumonia was rapidly cured, together with a fever and ague, and consequent dropsy, with which the patient was also troubled. (4. 11.)

CASE 21.—A girl, aged fourteen, took twenty grains of Tart.-emet. in the course of two weeks when a pustular eruption appeared exactly similar to that caused by the ointment when applied to the skin. (4. 11.)

Clinical Remarks.—The homœopathicity of this medicine in *variola* is strongly marked; and it is now recognized by the physicians of our school as one of the most important remedies.

A man, twenty-eight years of age, of bilious temperament, vaccinated in his youth, was taken with the ordinary premonitory symptoms of variola, such as chilliness, fever accompanied with thirsty feeling of soreness in the throat, headache and cough, for which he received Aconite and Belladonna in alternation for about twenty-four hours, after which, the fever abated. As there were cases of variola in the neighborhood, I suspected at once this case to be one, before the characteristic eruptions had made their appearance, and he was directed to take Stibium $\frac{1}{100}$ at first once in two hours, and as the case progressed, once in three or four hours. The eruptions appeared very thickly on the surface of the body, also partly affecting his throat; the patient went through the course of this disease in twelve days without any unpleasant symptoms remaining. (26.)

CASE 22.—A young man, aged twenty-two years, of rather delicate frame, was taken similarly as the case above cited, received the same treatment, and was convalescent on the eleventh day.

Three cases of varioloid, two of which were children, one five and the other eight years of age, and the third case a youth of sixteen years; all of which received no other remedy than Tartar-emetic $\frac{1}{100}$ terminated in recovery in from nine to thirteen days, leaving no permanent marks on their faces. (26.)

Dr. Nevins experimented on ten rabbits, the doses varied from one-half to two grains; it required from twelve to seventy-three grains, in divided doses to cause death. (4. 11.)

For the first few days no striking symptoms were present; then the animals lost spirit in a great degree, and gradually became emaciated, but continued to take food almost to the hour of death.

All who lived beyond the tenth day had diarrhœa—rabbits are incapable of vomiting.

Cramps were not present in a single instance, but several died in violent convulsions for one-quarter of an hour before death.

The mouth was very severely ulcerated in several.

One pregnant rabbit continued to increase in size and weight for two weeks, when all motion in the belly ceased, she lost weight and flesh and died while giving birth to a litter of seven dead immature fœtuses. (4. 11.)

PATHOLOGICAL APPEARANCES.

Emaciation often extreme, so that not a trace of fat remained in the body. *Mouth* ulcerated. *Stomach* frequently inflamed in patches, but not throughout; sometimes, but rarely, ulcerated—always more than half-full of blood. *Pylorus* frequently so thickened and indurated as to resemble cartilage under the knife. *Small bowels* frequently inflamed in patches, but rarely ulcerated. *Intestinal glands* sometimes excessively enlarged. *Large bowels* generally healthy. *Liver* generally congested in parts, occasionally inflamed, hard or brittle. *Kidneys* generally more or less congested, sometimes one only, at others the upper portion of one and the lower of the other. *Bladder* generally distended with urine and more vascular than usual. *Brain* generally healthy. *Lungs and Trachea* frequently congested, sometimes highly inflamed; the two lungs seldom alike. In several cases there was extensive extravasation of blood upon the surface of the lungs, and of the liver and stomach, and beneath the mucous surface of the cœcum. *Heart* healthy and generally full of black coagulated blood. (4. 11.)

DISTRIBUTION IN TISSUES.

It was always present in the liver after five grains were given; appeared in this organ before it was clearly proved present in any other organ except stomach.—It appeared next in kidneys, and after the fifteenth day was present in the bones. Its presence was also lastly proved in the blood, lungs, urine, fæces, both hard and soft.—In the *brain* it never was clearly present, and its evidence in the muscles was very slight. (4. 11.)

ELIMINATION FROM SYSTEM.

It was constantly passing off by the urine and fæces, and was discovered in both these excretions, abundantly in some rabbits which survived twenty-one days after the last dose was given; and in the fæces was slightly present eighty days after last dose.

It disappeared from the liver about the fifteenth day, and from the kidneys somewhat later; whilst it was found abundantly in the bones thirty-one days after the last dose. (4. 11.)

EFFECTS ON FŒTUS IN UTERO.

In the litter of seven it was found abundantly in the placenta and livers examined separately; in the remaining contents of abdomen—in contents of chest—in the flesh and bones. (4. 11.)

In *Porrigo decalvans*.—Doct. Carter, an army surgeon of considerable experience, has often succeeded with it in restoring the growth of the hair that had fallen out, in consequence of acute diseases, abuse of Mercury, &c. 5 grs. to 1 oz. distilled water.

Two cases of partial baldness were cured by Beauchamp.

In one case the solution was too strong and brought out a crop of pustules not only on the head, but over the whole body, attended by fever. The fever subsided, pustules disappeared, except on the head, where they coalesced and formed an immense scab, not unlike tinea capitis. (11.)

Chomel does not think highly of it in pneumonia; only uses it after bleeding; is always of most efficacy when the first violence of the disease is arrested, and there is an indication of tendency to remission or abatement, i. e., when it is about to get well of itself. (11.)

Ceneglographie Acut. 1843, p. 31.—Magenie says, if it be put into the stomach or upon a wound, or any absorbing surface or injected into the veins, it will always cause inflammation of the lungs; also inflammation of the villous tunic of intestines, except the dose be too large and death too rapid, when bowels are healthy but lungs gorged with blood. (11.)

Trousseau, Piloux and Schæpfer have injected it into the lungs of several horses, and always caused a violent inflammation of the mucous coat and parenchyma. (11.)

Trousseau thinks it only causes stasis in the lungs.

Campbell put 25 centigrammes upon a wound in a cat; it died, but the lungs were not inflamed.

Rayer and Bonnet could never find it.

Orfila says that if introduced into a wound or the stomach, it is absorbed and carried by the blood to the different organs, where it remains but a short time; is then ejected with the urine.

It is purgative if dissolved in a large quantity of water.

Trousseau and Bonnet have given it to many but slightly indisposed, without fever, and remarked important effects upon the circulation, respiration and urine.

1. Circulation.—Pulse feebler, diminished $\frac{1}{6}$ or $\frac{1}{4}$ in one case, fell from 72 to 44; frequently noticed irregularity, generally preceded by diminished frequency, (ralentissement.)

2. Respiration.—Ralentissement still more marked than in the circulation; fell from 16, 20, and 24 to 6 per minute, without bad effects.

3. Urine.—Secretion very considerably increased when it is tolerated; thinks that those articles that calm the circulation are diuretic, while those that stimulate it, as opium, alcohol, poisonous solaniæ, ammonia, increase the transpiration but diminish urine.

The calmness of the pulse and respiration continue for several days, without a repetition of dose.

Is a topical irritant of the most violent power.

TARTAR EMETIC-ERUPTIONS.

Pustular eruptions with brown serum; redness and erysipelatous tension of the skin; small scabs replaced by indelible cicatrices.

Some hours after first friction the skin becomes hot and animated; slowly small isolated pustules (aqueous) with a red areola, develop themselves; in the interspaces the skin is red and tumefied, (Rhus?) and the resemblance to small-pox very marked.

If applied again, pustules slowly enlarge, blue in color, depressed in centre, and contain pus; on 4th or 5th day they become confluent, pain then is very great; crusts with depression like those of small-pox.

May cause pain, sense of grattemens or heat from the mouth to the throat; a sensation of burning along the whole pharynx and œsophagus, without redness.

Angine et stomatite erythmateuse.—Violent irritation of throat with difficult swallowing; swelling of tonsils; bright redness of pharynx; insupportable fire in the throat; all liquids caused feeling of burning; erythmatous eruption on the lips. (11.)

Salivation Antimoniale.—The tongue, whatever be its dryness, rugous and brown; it moistens as it becomes covered with flocculent and viscous coating; difficult to move; the teeth leave impressions on the sides (of the tongue) and ulcers like mercurial; throat equally covered with large mucous flakes; *continual spitting*; hoarseness and roughness of voice; on surface of tongue especially at the point, small round ulcers with lardy edges from size of a lentil to that of a 50 centime piece; these ulcers are very painful but cicatrize readily; in some the swelling of tongue and throat is such that the patient only talks en bigayant. If the antimony be stopped for several days, the buccal secretion diminishes, the tongue becomes red, lips recovered with a new epithelium, which is very tender and of a *remarkable dryness*, then the thirst is intense.

Angina, &c., may cause violent angina, excessive salivation.

Trousseau and Pidoux.—Mouth and throat are painful and tense; metallic taste and aphthæ are developed, not attended by constitutional disturbance.

Deposition of caseous products or pseudo-membranes upon the bucco-pharyngian mucous membrane

Mouth, tongue, throat, pharynx covered with a soft false membrane; pale, not continuous redness of subjacent mucous membrane, or patches of variable diameter more or less grey, sometimes transparent; tongue moist and yellow at centre, covered on its edges and inferior surface with false membrane; also upon veil and pillars of palate.

Pustular (internal) eruptions upon lips, tongue and palate; pustules like those on the skin. Pustules also in *stomach* and *bowels*, lips, tongue, palate and veil; also internal surface of cheeks, covered with about 20 vesicles or pustules of a whitish yellow color, flattened and with depressed centres, filled with puriform milk-colored fluid, with

great heat in mouth. On 3d day of eruption most of the vesicles had opened, and only yellowish pellicles remained; on the 7th day no trace left.

In another case, pain in the throat; the lips, gums, tongue and divers parts of the throat covered with small yellowish pustules like aphthæ.

P—— thinks aphthæ common from Tartar-etic, has seen it nine or ten times; painful and at times dangerous; may last two weeks. Aphthous pustules very painful on lips and mouth, or upon the lips, and persist for a long time.

Chomel.—Two cases of pain in throat, notable difficulty of swallowing; numerous ulcerations the size of spangles, very superficial, with a white mucous exudation on neighboring parts

Andral.—Pustules, ulcerated at the summits; aphthous angina followed by ulcerations.

Rayer says it causes angina, generally erythematous, but sometimes pustulous.

James.—Salivations six times, with aphthæ in the mouth.

Andral.—Two or three “plaques” in upper part of the œsophagus, size of grains; epithelium destroyed, slightly depressed, covered with yellow soft pulp like pus, and which presented traces of circular lines and inequalities, like the pustules of ecthyma when macerated. Inferior portion of œsophagus, an unequal ragous patch nine or ten centimetres long, with several arborizations, evidently the result of the confluence of a great number of pustules; almost injected.

Sensation of constriction in throat; membraniform exudation upon velum palati and uvula, as well as palatine vault; fuliginous tongue; difficulty in opening mouth; great constriction of throat; painful deglutition; hoarseness; pultacious coat on tongue; palatine vault covered with thick membranes and pustules, with depressed centres, or like reversed cones; cavities giving a spongy appearance to parts.

Uvula, pillars and palate covered with pseudo-membranes, with elevation and distention, but without ulceration of part of epithelium; the rest of pharynx covered with umbilicated pustules, or complete destruction of parts of the mucous coat, with redness of others; whole of œsophagus covered with similar pustules.

Sensation of heat and scratching in throat, with small, aphthous-like patches on isthmus of throat and pharynx.

Tongue became very red and covered with a large number of white aphthous-like pustules; tongue remained red for a long time after they had disappeared.

Causes a predisposition to development of aphthæ: some facts go to show that these may be produced by absorption. A large tartar-etic plaster on stomach, caused violent fever with development of aphthæ in mouth, and swelling of the parotids. The interior of the mouth was carpeted with a considerable aphthous eruption.

In large doses will cause various forms of stomatitis and angina.

It is not necessary for the doses to be very large or concentrated;

a single dose of 30 centigrammes in 450 grammes of water, caused a membranous exudation on veil of palate.

Holland, vol. 31, p. 92.—As a febrifuge in the most direct sense of the term, Tartar-emetic is the most speedy and effectual, perhaps, that we possess; this is recognized by those who have witnessed its effects when adequately given in pneumonia, bronchitis or croup. When it does not entirely supersede bleeding as a prior remedy, it at least abridges the demand for it.

Macartney, vol. 30, p. 136.—It is remarkable how speedy and certain the effect of a combination of Tartar-emetic and Opium often is in affections of the brain. This is sometimes strikingly shown in the wild recklessness of delirium-tremens; also in fevers with much cerebral disturbance, and in convulsive diseases, effects not so readily nor so completely obtained by Opium alone.

Unable to understand on what grounds the very large doses of Tartar-emetic now so fashionable are prescribed, from one grain in a pint of water, a table-spoonful every half hour, an extreme degree of nausea will certainly be excited, with reduction of pulse in strength and frequency, and some perspiration; this nausea may be kept up.

In some persons it produces an alarming degree of prostration and distress; when long continued, it induces tenderness of gums, an increased flow of saliva, and a *cadaverous* fætor of breath.

PETERS & BOLLES.

ON THE TISSUES.

On the Muscular Tissue.—A well known effect of this substance, is to relax the muscular system. This is due to its depressing influence upon the circulation and the nervous system. A knowledge of this property has induced the accoucheur to employ it in rigidity of the muscles of the uterus during parturition, and the surgeon to prescribe it in tetanus, dislocations, &c. (10.)

Clinical Remarks.—In reducing long-standing dislocations, Tartar-emetic is a valuable adjunct to blood-letting and the hot bath, in relaxing the muscular system. The dose must be regulated by the strength and age of the patient. It should be given until it induces complete nausea. Continued vomiting should be avoided. Chloroform has, however, almost completely superseded the use of these measures. (44. 42.)

Sir Astley Cooper and Liston have occasionally employed it successfully in tetanus.

As a muscular relaxor in tedious labor, it has received the commendation of Tyler Smith, Churchill, Kenedy, and West. In all these instances the drug was prescribed in nauseating doses. (10.)

Cellular Tissue.—Applied to the cellular tissue, its absorption is very soon manifested, all its physiological effects being produced in a very short time. Applied to a wound a grain and a half constantly killed dogs in a period varying from seventeen to thirty-six hours. (9. 42.)

In some dogs submitted to observation after its administration by mouth, the liver increased to three times its natural size, and one bitch took tartar-etic five days only, and a fortnight afterwards littered several living pups, in the livers of which antimony was detected in large proportions. (52. 42.)

Mr. Richardson in view of the dearth of well-established facts regarding the physiological effects of tartar-etic on the healthy, instituted a series of experiments upon dogs with unusual care. The first experiment was the introduction of one drachm of tartar-etic held in solution by two ounces of water, beneath the skin of the abdominal walls, on the right side of a large and healthy dog. For the first half hour the animal paid no attention to the wound, then vomited freely, with chills, followed by much prostration. In the succeeding half hour he made many attempts to vomit, passed flatus freely from the bowels, and was once briskly purged. In an hour's time he was greatly reduced, surface and breath cold, pulse and respirations slow, and in one hour and forty minutes from the administration of the dose he died. (42.)

PATHOLOGY.—Marked cadaveric rigidity; no special redness about the wound; *intense congestion of the internal organs*; large venous channels distended to the last degree; both sides of the heart distended; aorta full of blood. Lungs dark and full of blood, but showed no traces of inflammation; blood generally fluid; the stomach along its larger curvature was of a bright pink color throughout a small extent of surface; no ulceration of alimentary canal, but coated with a glassy buffy looking mucus. All the internal organs on analysis yielded distinct traces of the poison, but the blood appeared more fully charged than any other part. (52. 42.)

Clinical Remarks.—Large pustules extending into the cellular tissue, and leaving deep cicatrices on healing, have been noted as pathogenetic effects of Stibium, both from its internal and external use. Experience has demonstrated its utility in cases of this kind, as well as in carbuncles and other abscesses involving the cellular structure. (10.)

It has been occasionally employed by eminent physicians of the old school as a remedy in acute dropsy, but the results obtained have not been such as to give it importance in this class of maladies. (10.)

Tartar-etic is more homœopathic to suppurative, than serous inflammations. (11.)

CASE 23.—From the back of the neck of another dog the hair was removed for a space the size of the palm of the hand; a crucial incision made in the part of the wound dressed with tartar-etic ointment, (an ounce and a half of the salt to four ounces of lard.) The wound was dressed with this for seven days. Little local mischief ensued, with only a slight increase of the temperature and slight oozing. From the first day the animal lost appetite, but throughout *was neither purged nor vomited*. He refused food, became gradually thin and exhausted, and died as from inanition. (52. 42.)

¹ **PATHOLOGY.**—*Intense congestion of the internal organs* as in preceding cases; blood fluid; heart full of blood; lungs inflated, of a pink color; bronchial and pulmonary membranes healthy; same redness of the greater curvature of the stomach, and mapped out in a manner almost identical. (52. 42.)

On the Fibrous Tissue.—Some of the fibrous structures have been found thickened and indurated after a long-continued use of Stibium. While under its influence, the pains are prone to shift from one to another of these tissues. (10.)

Clinical Remarks.—Acute rheumatism has been successfully treated by the French physicians by large doses of Tartar-emetic. Brichteau speaks of this treatment as being in the highest degree satisfactory. Dr. Griffin made a fair trial of its virtues in such cases, and states that though in some cases it proved effectual, in others it failed to afford relief. He administered it every hour for many successive hours. It appears to be inferior in efficacy to Colchicum, Nitre, or lime-juice. (42. 44.)

Teste has employed it with considerable success in articular rheumatism.

Dr. Gray of New-York states that he prefers this preparation to the crude antimony in the treatment of acute articular rheumatism, in cases embarrassed by gastric symptoms, which according to our authorities call for that preparation. His reason for the choice is that the tartar-emetic has produced the desired effect more promptly in his hands than the crude antimony. (42.)

In acute articular rheumatism, however, it has been found highly successful, particularly by Laennec, who states that it effected a cure in a majority of cases in seven or eight days. (44. 42.)

Chronic rheumatism, with slight pains shifting from place to place, and daily attacks of dryness of the skin, followed by cold and debilitating sweats, have often yielded promptly to this remedy. (10.)

In *Hydrarthrosis*, (articular dropsy) tartar-emetic appears to exercise a powerful influence. M. Gemille particularly speaks highly of its efficacy. In twenty-eight cases treated by him, the doses were enormous, but he states that it was invariably with the effect of causing the absorption of the fluid in eight to sixteen days. In twenty-five the pain and stiffness disappeared simultaneously with the effusion, and a complete cure was effected. In two the pain and stiffness remained, and one appears to have derived little benefit. The longest period during which the remedy was administered was sixteen days. In the majority there was neither purging nor vomiting, nor any ill consequences: in those in which these did occur, they were only temporary. M. Gemille saw all the patients some months after treatment, and in none did any relapse occur. (44. 42.)

In *inflammation of the joints* Tartar-emetic forms an important part of the treatment. (44.)

In two cases of advanced hip-disease, accompanied by hectic

symptoms, like daily paroxysms of fever and sweat, with exhausting diarrhœa, we have seen marked benefit from the third trituration of tartar-etic. (10.)

Dermoid Tissue and Skin.—Pale, cold, clammy skin. Disposition to swellings, erysipelas and ulcers. Itching of the skin. Small red spots on the hands, resembling flea-bites. Itching suppurating rash on the upper portion of the body. Itch-like eruption. Pustulous eruption over the body, particularly on the genital organs. Single vesicles resembling chicken-pox, followed by desquamation, which leaves a red spot, afterwards becoming whiter than the surrounding skin. Small red pustules, increasing in size and number on the third day; on the fourth surrounded with brown elevated edges, form crusts and suppurate in the centre. Some attain a large size, looking like flat ulcers containing much pus. After the pustules, a rash over the whole body, with profuse sweats, difficult breathing, constant heat, thirst and headache. (32.) Skin dry and warm. Skin perspires freely; desquamation of cuticle. (12.) Vesicular eruption over the body. Eruption of pustules and vesicles, which fill with pus in two days, similar to variolous pustules, and very painful; these pustules dry and form crusts; this eruption comes out at first on the face and forearms and then upon the back. (65.) Skin of the head and extremities cold and clammy. (45.)

Clinical Remarks.—Dr. Lichtenstein of Brunswick says of the Tartar-etic pustule, “the clear lymph of the pustules which arise from the external application of tartrate of Antimony produced inoculation pustules which are quite indistinguishable from those produced by vaccination. They seem to confer the same protection from cow-pox and small-pox, they excite fresh pustules by inoculation, and in general in other respects would appear to be analogous to cow-pox. The first experiment he made with them was in the summer of 1836; but as he never heard of any similar ones, he was then diffident about them; up to this time he has made thirty-one vaccinations and re-vaccinations with lymph of Tartar-etic pustules, and has found them in all their relations analogous to cow-pox lymph. (12.)

Bethmann reports the case of a patient whose body was covered with numerous and large pustules filled with pus, and whom he treated unsuccessfully with Sulphur. He administered one grain of the fourth trituration of this remedy, and in a short time the skin became clear, and the eruption disappeared without leaving cicatrices.

Dr. Liedbeck of Stockholm states that he has never seen a case of small-pox terminate fatally when treated by Tartar-etic in doses smaller than those ordinarily given. He states that all his cases yielded to Tart.-ant. in small doses without leaving a vestige of any after-effect. He states that the identity of the Tartar-etic pustule with the small-pox pustule first suggested to him the remedy, and its property also, according to Hahnemann,

of producing miliary-fever, scabs, &c. All the symptoms are vastly mitigated by the use of Tart.-stib. in doses of one-half to one grain, dissolved in a pint of water, administered in table-spoonful doses every fourth hour. Often after the first dose he has found the tongue clearer, the fever subsiding and even the difficulty of swallowing was much less, when the remedy had been administered in time. Dr. Berg regards it as the one remedy to be relied upon when there is irritation of the respiratory mucous membranes. He states that in the Stockholm epidemic of 1838—39 this complication seems, without exception, to have been the cause of the fatal terminations when such occurred; and while, where the disease was uncomplicated, he left it to itself, if bronchial irritation declared itself, he ordered the repeated use of Tart.-ant. in small doses. Dr. L. says that after nine years' further experience he would refer to the administration of Tart.-stib. as a *substitute for* cow-pox inoculation. In Froriep's Notizen it is stated that tartarized Antimony in large doses has produced dryness, heat and redness in the throat, as also internal eruption; in the mouth, throat, larynx and trachea even were found large pustules with depressions in their centres.

He avers that in confluent small-pox there is no doubt that it is a febrifuge remedy and allays the irritation of the skin better than any other remedy. (12.)

Dr. Stewart of Natchez has found it a remedy of great value in small-pox. He writes: "For the last eight years I have relied almost entirely on the Antimonium-tartaricum in the treatment of variola—of which disease I had a very considerable number of cases during the period of my practice in the city of New-York. I have used it in the first trituration and given it freely so as to produce in a slight degree some of its earlier constitutional effects—not however carry it *ad nauseum*, as I believe all its curative influence will be obtained inside that extent. I have seen some cases in which the eruption had reached the papular and vesicular stage, and where the disease threatened to become confluent, promptly arrested, and the eruption subside without passing on to the pustular stage. As the different stages of this disease succeed each other quite rapidly, it is advisable to establish in the system as soon as possible the action of the drug; and to accomplish this I have observed that it requires a much less quantity than when used allopathically or antipathically to the disease. This fact of itself is no slight proof of its homœopathicity."

Dr. Fullgraff has treated successfully many cases of variola with this first trituration, using as an intercurrent an occasional dose of Protiodide of Mercury.

Dr. Frelich commends it highly in pustular eruptions on various parts of the body resembling small-pox. He has cured with it several inveterate cases of "barber's tetter," which had resisted many other apparently appropriate remedies.

Our experience with it in variola, lichen, porrigo, eczema, and prurigo, has been favorable. In all chronic cutaneous affections, how-

ever, we are in the habit of using from the sixth to the twelfth dilutions. (10.)

I became acquainted with Lichtenstein's experiments fully twelve years ago, and believe I was the first in this country strongly to recommend Tart.-emet. in small-pox, variola, and many pustular and suppurative affections. It is the homœopathic remedy "*par excellence*" against purulent and suppurative affections. (11.)

In *bilious erysipelas*, or in that originating with strongly-marked gastric disorder, Desault advises Tartar-emetic, largely diluted. He states that he has seen the symptoms entirely subside under its use, although the medicine produce no other sensible alteration in the animal economy than an increase of perspiration and of urine. More recently Dr. Welsh expressed his opinion that this salt acts specifically on erysipelatous inflammation. He says that there is no form of the disease which should not in the first instance be attacked with Tartar-emetic, whether there be high inflammatory fever, low fever, vomiting, or purging; under all and every circumstance, we shall find he adds, that the disease will yield to this remedy. A tonic course is sometimes necessary to complete a cure. (44.)

Although its internal use sometimes produces a vesicular eruption resembling erysipelas, yet as a general remedy in this malady, it cannot compare in value with Rhus and Belladonna. It is most likely to prove serviceable in cases accompanied by constant nausea, bilious vomiting, watery or brownish diarrhœa, cold sweats, and great prostration of the vital forces. (10.)

ON THE NERVOUS SYSTEM.

On the Ganglionic Nerves.—When given persistently, and in small but appreciable doses, it impairs somewhat the integrity of this system of nerves. Occasional attacks of nausea, with vertigo on moving about, apathy, and delirium, are among its pathogenetic effects. Also short, difficult and imperfect respirations, diminished action of the heart and arteries, and a general feebleness of the involuntary muscles may be cited as results of its influence upon the ganglionic nerves.

Dr. Moore of Liverpool thinks that Tartar-emetic bears a strikingly homœopathic relation to delirium tremens, and he has been extremely successful in its treatment with it. In the trembling and cold perspirations it is eminently homœopathic, and its cerebral pathology shows a great similarity to that which is met with in many cases of delirium tremens. He believes it will be found most serviceable in those cases where vomiting or purging, or nausea are prominent symptoms. (12. 42.) (See toxicological effects, page 391.)

The German physicians place much reliance on this remedy in delirium tremens. Stoll administered it in very large doses often repeated, but this practice has few advocates. Dr. Goldberg recommends it, administered almost at the point of nausea, and continued for two or three days if the excitement does not abate. He

states that he has found this plan very successful, and that he has never seen it produced any ill effects. It is rarely given alone in England, but in alternation with Opium it produces the happiest effects; often inducing tranquillity and sleep when other means had totally failed. (44. 42.)

We have sometimes found the first trituration useful in *mania à potu*, when the patient has suffered from great prostration of the vital forces, but was now and then able to rouse himself with much temporary strength, and in furious delirium, and then to relapse again into a state of apathy and prostration. (10.)

This has been conspicuously the case in the homœopathic practice. In many cases when the ordinary remedies had totally failed in procuring relief, and the patient was in imminent danger, a fortuitous administration of a dose or two of Tartar-emetic has controlled the disease, and brought about a favorable change. Dr. Moore in a paper on the subject gives the case of a young man who "ran away" from his ordinary physician to put himself under the care of a young practitioner of another town, through whom he had once before experienced relief; and though he had received no benefit up to that moment, he was again successful. The potent drug was Tartar-emetic. (46. 42.)

In *puerperal convulsions* Dr. Collins speaks highly of the value of Tartar-emetic. He gives it to the point of nausea. (41. 42.)

When a practitioner of the old school, we once cured a case of traumatic tetanus by a persistent use of nauseating doses of this drug, in conjunction with constant applications to the spine of fomentations of hop-water and tincture of Belladonna. The symptoms abated gradually, and disappeared at the expiration of eight days. (10.)

From its well known power of relaxing the system it has occasionally been employed in *tetanus*. Cases successfully treated by it are recorded by Mr. Liston, Mr. Woodward and others. The great objection to its use, is its tendency to induce vomiting, an effect which has been observed to increase the severity of the symptoms. It certainly ranks as a minor remedy. (44. 42.)

In *epilepsy* and other diseases depending upon plethora, Dr. Cheyne advises its use to be commenced and continued until a notable effect is produced upon the stomach, bowels or skin. He speaks highly of its efficacy. (44. 42.)

In *St. Vitus-dance*. A girl, aged fourteen, had suffered for five weeks with chorea in an extreme degree, which had resisted all the usual narcotic remedies; she was emaciated to a skeleton, and was almost dead with the most frightful tonic, but more especially clonic cramps, which persisted night and day, almost without cessation. Then Tart.-emetic was given in half-grain doses every three hours; not the least nausea or vomiting was caused, but obstinate constipation was relieved; in twenty-four hours the cramps were lessened, and ceased entirely in two days; the remedy was continued for ten

days, when the patient was perfectly well and blooming. (4. 11.)

A boy, aged eight, had suffered with chorea for six weeks; he was not even free from it during sleep; he had just had chicken-pox and had taken cold; Tartar-emetic ointment applied to the spine cured him quickly. (4. 11.)

A girl, aged twelve, who had grown very rapidly, and had been subject every autumn for five years to an eruption on the face and forehead, was attacked with St. Vitus dance after the eruption was suppressed; she had already suffered for seven months, and almost every remedy had been tried without success. A strong ointment of Tartar-emetic was then rubbed on the nape and upon the inner side of both arms; improvement commenced within eight days after the antimonial pustules appeared, and she was quite well in four weeks: the cure was still permanent at the end of one and a half years. (4. 11.)

A boy, aged twelve, who had suffered for a long time with St. Vitus dance, and the most wonderful convulsions occurring every morning at nine o'clock, was cured by the application of Tartar-emetic ointment to the pit of the stomach, where he always felt premonitions of the approaching attacks. (4. 11.)

ON THE VASCULAR SYSTEM.

On the Blood.—We are not aware that any direct chemical or dynamic effect is produced by Emetic-tartar upon the blood, but indirectly its influence is important. All provers agree that it produces an inflamed and congested condition of the lungs, with short and imperfect respirations. A necessary consequence of this condition is an imperfect decarbonization of the blood, with its attendant phenomena, diminished evolution of animal heat, impaired nervous and muscular force, exhausting mucous and cutaneous secretions, &c. (10.)

Clinical Remarks.—**INFLAMMATIONS.**—In *inflammatory, continued, and remittent fevers*, Tartarus-emeticus is a most valuable remedy, fulfilling two important indications, viz., subduing the morbidly increased action of the heart and arterial system, and determining freely to the skin; unless contra-indicated by great gastric irritability or cerebral complications, a strong antimonial solution at the outset of the attack may be given with manifest benefit, although it does not, as formerly supposed, cut short the fever. In the more advanced stages of fever, Ant.-tart. every one or two hours, in alternation with Opium exercises a most beneficial influence. In those cases where it is inadvisable or impossible to administer Antimony by mouth, it is recommended to exhibit it by means of an enema; for this purpose it should be thrown high up into the bowels by means of a long flexible tube. In this way you can secure all the good effects of Antimony in overcoming congestion of the brain and in procuring sleep. In the *cerebral complications* of fever, Dr. Graves speaks in the highest terms of the efficacy of Opium and Tartar-emetic; in the third and last stage

he has also employed it with great benefit, conjoining it with a slight tonic or stimulant treatment.

In *intermittent fevers*, an Antimonial preparation unless contra-indicated, given at the outset of the attack, is attended with evident benefit. In mild cases, a complete cure is often effected by its continued use, every two hours; strict attention being paid at the same time to the condition of the bowels. Dr. Moore's treatment was to administer a brisk purgative, provided the fever was not complicated with any local affection of important viscera or organs, and then to proceed with the Antimony. He uses quite a weak preparation, viz., one grain of the pure salt to a hundred ounces of water, sometimes, however, using ten grains to the hundred ounces. Should complications exist they are to be met by the use of the appropriate remedies, but they need not interfere with the continued use of the Antimony.

In *acute inflammation of the heart or its membranes*; in that of the *lungs, pleura, peritoneum, the brain and its membranes*, and also in *acute bronchitis*, Tartar-emetic is a powerful therapeutic agent. It controls the action of the heart and arterial system, lowers the force and frequency of the pulse, depresses the action of the vascular system, increases the urinary secretion, and produces a certain amount of diaphoresis. There are few inflammations which will not yield to it if taken at an early stage, but the patient requires to be carefully watched, and any signs of returning inflammation to be met by a repetition of the same remedy. There are some inflammations, however, in which Antimony must be administered with great caution; thus in *acute meningitis* it should never be given in such doses as to produce vomiting; should this symptom supervene, its use should be suspended, or at least the dose diminished. In *pleuritis* also, it is necessary to guard against its emetic effect; and in *Nephritis*, it is seldom admissible, in consequence of the great tendency to vomiting which generally accompanies this inflammation. Dr. Watson considers Antimony most useful in inflammations of mucous membranes, and not nearly so valuable a remedy as Mercurius when serous membranes are the seat of disease. When, however, these remedies are alternated, they appear almost equally useful, whether the seat of inflammation be the mucous or serous surfaces. (44. 42.)

In palpable doses frequently repeated, it is undoubtedly antiphlogistic. Its special action upon the stomach, the circulation, and the mucous and cutaneous secretions, all indicate its general influence as an anti-inflammatory drug. Short, difficult, and imperfect respirations, feeble action of the heart and arteries, and nausea, are among its characteristic symptoms; and the direct effects of these symptoms are diminished animal heat, impaired muscular and nervous force, and an amelioration of those phenomena which are termed inflammatory febrile, &c. But these effects are antipathic, and are produced by the primary action of appreciable quantities of the medicine.

It is homœopathic to a feeble and impaired condition of the circulatory system, to congestion and other obstructions of the pulmonary

apparatus, and to a general prostration of the forces. As we progress, its homœopathic relations will be minutely detailed, so that the homœopathic practitioner will always be able to select and apply the remedy in accordance with his law of cure.

Let it be remembered that the editors deem it their duty to present to their brethren from all reliable sources, all facts pertaining to each drug, whether pathogenetic, clinical, or pathological. Thus allopathic experience is placed side by side with that of the homœopathist. It is the part of the physician to make his practical deductions from these facts, and he who has a firm conviction of the truth of his therapeutic law, will find no difficulty in applying them appropriately. Personally we have an abiding faith in *similia similibus curantur*, and prescribe accordingly; but we have never found any disadvantage from consulting the observations and experience of our old-school brethren. (10.)

It has been advised by Dr. Turnbull in plethora, particularly that form denominated "sthenic." He states that a perseverance in the use of the remedy, will be found generally efficacious in reducing the fullness of the system and the frequency of the pulse. Mercurius may be sometimes alternated with it in this condition with advantage. (44. 42.)

Dr. Gray has for many years been in the habit of treating the coma which occurs in the height of febrile paroxysms with this drug. (See Head.) (42.)

In the treatment of gastric and bilious fevers, Dr. Gray gives the preference to the Tartar-emetic over the crude antimony, which is called for by our authorities, as the former produces the desired result much more quickly and satisfactorily. (42.)

Respecting the remittent and continued malarious fevers he remarks, "I would suggest with unfeigned diffidence the application of the tartarized Antimony, in doses of $\frac{1}{16}$ of a grain, repeated every two to four hours, throughout the whole period of incubation, and further still, (unless very strong indications for other drugs are developed,) even till the fever assumes a distinctly intermittent character, admitting of its then denoted specific; as for example, China, Arsenic, or Ipecac. If, however, the dose indicated produces any sensible effects, especially if it provoke nausea, or clearly aggravate it when present, I would immediately stop its use for twelve hours, giving in the interval a dose or two of Pulsatilla, and then resume it in a smaller quantity, say the first or second trituration. The success of our school in the treatment of severe forms of malarious fevers, has not been such in my judgment as to render this suggestion respecting Antimony wholly superfluous. It is my conviction that this drug covers more of the symptoms of the bilious fevers of our climate, in the first seven to fourteen days of their existence, than any other as yet known; and I am accordingly persuaded that the riper experience of later times will give it in our school the rank which George Fordyce in vain sought to give it a hundred years ago in the ordinary practice. (42.)

Fever.—Anxiety and restlessness. Great malaise, with involuntary moaning. Cold creeping; chilliness, with tremor. Death-like coldness after clonic spasms, with collapse of pulse. Chilliness with flushes of heat. Great heat and thirst. Excessive heat and increased urine. Profuse sweats, also night-sweats. Throbbing pulse. Irritated pulse. Weak and small pulse. Suppressed, irregular, imperceptible pulse. (32.) Heart's impulse scarcely perceptible. Profuse night-sweats. Pulse rapid, small, quick, and feeble. (12.) Shiverings which run over the whole body. He feels cold and is cold to the touch. (55.) The body is covered with a cold sweat. General cold, clammy sweat. Pulse feeble, depressed and almost imperceptible. Pulse small and contracted. Pulse small, hard and scarcely perceptible. (58.) Pulse accelerated, feeble, trembling. (4.) Fever coming on at eight o'clock in the evening; coldness with passing flushes of heat, (third day.) The next day fever at six o'clock, with loss of appetite, and then colic; (fourth day.) The two following days a similar fever at the same hour. (64.) Coldness during movement, alternating with heat. Heat and thirst for many days. (1.)

Clinical Remarks.—Dr. A. Leon, formerly of New Orleans, now of this city, informs me that in yellow fever, he has found the following symptoms yield readily to this remedy: nausea, or vomiting, with a sense of sinking at the stomach as if the patient would not survive a moment, general prostration of the whole system, white fur upon the tongue, profuse cold perspiration, rapid and weak pulse, drowsiness and disposition to go to stool. Dr. Leon prescribes one grain of the first trituration to six ounces of water, to be given in doses of a dessert-spoonful every hour or two. This course has generally afforded permanent relief to this group of symptoms within twenty-four hours.

In bilious fevers it is indicated when there are nausea, vomiting of bile, white coated and moist tongue, metallic taste, headache, principally over the eyes, with great lassitude and debility. In many of the bilious fevers which occur in tropical climates where the powers of the system fail readily, and leave the patient feeble and almost collapsed, it is more frequently indicated than in temperate latitudes. Dr. Leon has often employed it successfully in the bilious fever of Louisiana and Mexico. (10.)

Through the medium of the Milk.—Tartar-emetic is one of the substances which appear to have the property of acting on the infant through the medium of the nurse's milk. M. Minaret has published a case of the kind in which the infant of a young woman was attacked with vomiting after every application to the breast, while the mother was taking Tartar-emetic for pleurisy. Another case is also given by Dr. Wetmore from the Medical Museum published in 1764.

CASE 24.—The patient who was laboring under an obstinate attack of leprosy, which had resisted all the remedies in vogue at the time, was advised, more *per forma* than with any expectation of benefit, to drink ass's milk. This he did, with such surprising results immedi-

ately following its use, that the astonished physician was led to investigate the cause of the charge. The paddock in which the animal fed was searched for some plant which might explain the cure, and also the excrements were examined but without success; but as the physician cleansed his cane from the ordure in a trough from which the animal drank, a hard substance was felt, which turned out to be a piece of *crocus metallorum*, or oxysulphuret of Antimony, placed there for the purpose of curing a number of mangy hounds. This, then, was the secret of the cure. How minute must have been the portion of Antimony which, washed from the parent mass, pervaded the water, was imbibed by the ass, eliminated through the lacteal secretion, reached the disease of the patient, and yet sufficed for a cure. (42.)

TREATMENT OF POISONING.

A case of poisoning with Tartar-emetic is usually treated with tincture or decoction of bark, particularly the yellow bark, or any vegetable decoction which possesses the power of decomposing the poison, preceded by copious draughts of warm water and irritation of the fauces to induce vomiting. It is alleged that infusion of galls, and in a greater degree the powder of galls, is a still more efficacious antidote to the poison.

CASE 25.—In the following case the cure is probably to be ascribed to the antidote. A man, purchased half a drachm and swallowed it in a cup of coffee. Very soon he was attacked with burning pain in the stomach, convulsive tremors, and impaired sensibility, then with coldness of the surface, hiccough, swelling of the epigastrium but no vomiting. Decoction of cinchona was given with instant relief, and with some slight resulting inflammation, he eventually recovered. (42.)

CASE 26.—A man, took sixty grains, followed by violent vomiting, hiccough, cramp and burning heat in the stomach, colics, distension of the abdomen, profuse diarrhœa, fainting fits, small, contracted pulse, and coldness of the skin.

A decoction of nut-galls produced immediate relief, and one ounce doses frequently repeated soon cured him. (4. 11.)

CASE 27.—A lady, swallowed by mistake for whey a solution of sixty grains. In ten minutes she was seen by her physician, before vomiting had commenced. Tincture of bark was at once given in large doses, and no unpleasant symptom occurred except nausea and slight colic. (42.)

PATHOLOGY.—The morbid appearances caused by Tartar-emetic have not often been witnessed in man. In a case of M. Recamier's there were some equivocal signs of reaction in the brain. The organs in the chest were healthy. The villous coat of the stomach, except near the gullet, where it was healthy, was every where red, thickened and covered with tough mucus. The whole intestines were completely empty. The duodenum was in the same state as the stomach; but the other intestines were in their natural condition. (9. 42.)

M. Jules-Cloquet observed in the body of a man who died of apoplexy, and who had taken forty grains of Tartar-emetic in five days without vomiting or purging, that the villous coat of the stomach had a deep reddish violet color, with cherry red spots interspersed; and that the whole small intestines, were of a rose-tint spotted with cherry-red. (9. 42.)

Hoffmann found in a woman poisoned by Tartar-emetic the stomach gangrenous, and the lungs, diaphragm and spleen, as it were, in a state of putrefaction. Little credit can be given to this description. In animals Schlopfer always found the blood fluid. (9. 42.)

Dr. Richardson lays down the pathological lesions as injection of the peritonæum; an inflamed aspect of the duodenum; a whitish yellow viscid secretion throughout the alimentary canal; intense redness of the stomach, in the course of the greater curvature but without ulceration; great vascularity of the brain. In one case there was effusion into the right pleura; the lower lobe of the right lung was redder than usual. This resulted from one large and fatal dose. (52. 42.)

CASE 28.—A delicate man took four grains; violent colic pains, nausea, diarrhœa and vomiting sat in, and finally passed over into excessive empty retching, to which such violent clonic cramps were added that four men could scarcely prevent him from injuring himself; these ceased in half an hour and he fell into a state of extreme prostration, speechless, pulseless and icy cold, so that he seemed dead; he gradually revived under the use of frictions, synapisms, food and stimulants; two days afterwards an inflammatory affection of the abdomen came on. (4. 11.)

CASE 29.—An infant, aged five months, had Tartar-emetic applied freely to a nœvus maternus; the child vomited, then fell into epileptic convulsions and died. (4. 11.)

CASE 30.—Three grains were dissolved in three ounces of water, and a table-spoonful given every hour to a rabbit; after the fourth dose it shut its eyes, became dull, had watery stools, followed by tremblings, *convulsions* and death in ten hours. (4. 11.)

CASE 31.—Another rabbit took the same doses of a solution of ten grains in four ounces of water; the first dose was followed by general tremblings; the second by profuse sweats, and debility; the third, by rattling respiration, *general convulsions*, violent cries, but no evacuations; death in five hours. (4. 11.)

Mind and Disposition.—Dullness and Dizziness. Delirium, muttering. Apprehensiveness, restlessness. Anguish with cold sweat. Tendency to start. Excessive uneasiness of mind. (32.) Unusual volubility and activity. Great craftiness. (12.) Furious delirium (the third day). He talks to himself. (1.) He appears as if under the influence of wine. (54.) Extraordinary apathy and indifference to life. (55.)

Clinical Remarks.—*Insanity.* When a full, hard pulse, and a hot, dry skin, co-exist with maniacal excitement, no remedy is more in-

dicated than Tartar-etic. It will in many instances bring about in a short time, a general relaxation of the system, free perspiration, soft pulse, and a cooler skin. It has more recently been strongly advised by Dr. Fleming. (44. 42.)

In the instance just cited Tartar-etic is antipathic. A more homœopathic and far more efficient course would be to employ Belladonna and Aconite in alternation. These remedies would afford permanent relief while the antipathic drug would only act as a temporary palliative. (10.)

In *puerperal insanity*, when the pulse is quick and the face flushed, Tartar-etic will be of use. (44. 42.)

Here also is an antipathic application of this medicine, and the benefit derived from it can only be transient and unsatisfactory; while ample experience has demonstrated the vast superiority of homœopathic remedies like Belladonna, Aconite, &c.

We entertain no doubt that crude doses of certain drugs when employed allopathically do occasionally afford temporary relief in diseased conditions of the body by creating revulsions to healthy parts, like the nausea and vomiting, the sweats, and the depressed circulation induced by Tartar-etic; but such effects are always followed by reactions which *aggravate* the original malady. The homœopathist should never be misled by apparent benefits arising from the *primary* action of allopathic medicines. Let him never forget that the reaction of the recuperative forces against the *primary* action of all crude drugs, always tends to the production of an *opposite* and *permanent* group of symptoms. Nor is this all. The perturbations to healthy structures caused by these primary actions, must necessarily complicate to a serious extent, any disease already present. (10.)

Sleep.—Drowsiness with vertigo. Irresistible desire to sleep. Deep sleep; lethargy. Restless sleep, frequently waking. (32.) Great somnolence and sluggishness for two days. Even when mounting a horse in the open air he feels a giddiness, and can with difficulty overcome his desire to sleep. At ten o'clock in the morning, he still feels so much inclined to sleep that he can scarcely keep awake; and he is so weary that he can with difficulty hold himself upright. Great desire to sleep during the day. (1.) During the night he is excessively agitated. During sleep, the respiration is unequal and intermittent. He talks in his sleep in a clear and coherent manner. (1.)

Head.—Vertigo with scintillations, particularly on lifting a thing, raising oneself, or walking. Heat in the head. Violent headache with vertigo and palpitation of the heart. Pressure in the temporal region. Dullness, drowsy and weary feeling. Headache with pressure from without inwards. Difficulty of moving the tongue. Acute pain in the right hemisphere of the brain. (32.) Vertigo and nausea. (55.) Sensation of weight and heaviness in the head. As soon as he raises his head he has a vertigo which obliges him to replace

it at once. (1.) Dullness and stupefaction of the head, with tensive sensation and drowsy and weary feeling. Trembling of the head during every motion of the body. Intermittent tearing in one side of the head. (1.)

PATHOLOGY.—Brain highly congested throughout. Arachnoid membrane too opaque. (12.) Thickening of the dura mater, which adheres firmly to the inner table of the skull. Towards the anterior portion of the left hemisphere of the brain, a circular portion of the dura mater of one inch and half in diameter was found ossified (in the case of a man, fifty years old, who had poisoned himself with forty grains of Tartar-emetic, and died on the fifth day). (absurd.) (2.). Cerebral substance softer than usual. A large number of elevations filled with a reddish serum, at the base of the brain. Arachnoid, red and inflamed on the right side between the two hemispheres. (2).

Clinical Remarks.—It is quite homœopathic in vertigo, heaviness and pressure in the head, with nausea, weakness, trembling, drowsiness, and aggravation of symptoms on raising the head, or on walking. We have often prescribed it successfully in dull headaches, drowsiness, and lassitude accompanying chronic hepatitis. Also in headache, or vertigo arising from gastric derangement. In these cases we have usually employed the third trituration. (10.)

Laennec treated successfully several cases of *acute hydrocephalus* with Tartar-emetic in large doses, viz., twenty grains daily. Dr. Mills adopted a modification of this treatment, combining small doses of Antimony with Mercury or Mercury and Opium, and it is stated by Dr. Cheyne that this treatment is sometimes effectual. The object of the treatment is to reduce the inflammatory action of the brain and to assist in restoring the secretions of the abdominal organs and of the skin. (44. 42.)

In *chronic hydrocephalus*, M. Recamier advised the use of baths containing Tartar-emetic in solution, in the proportion of ʒj. of the salt to a pailful of water. He states that it appears to reduce the size of the head, at the same time that it acted as a diuretic. (44. 42.)

In *influenza* Tartar-emetic proves highly serviceable. It often is most beneficial to give it in alternation with some other remedy, such as Kali-hydriod. or Conium. (42.)

Dr. Gray of New-York, remarks that he has given the Tartar-emetic with success in a case of apoplexy accompanied by fruitless efforts to vomit. The patient, a woman of sixty years, after lying quite unconscious for nearly twenty-four hours, had partially recovered her senses for forty-eight hours before I saw her, but had taken neither food nor drink. Her efforts to vomit were repeated about every half hour. Between these turns she appeared to be in an uneasy coma. The remedy was given in a watery solution $\frac{1}{10}$ of a grain; and this one dose was completely successful; the efforts to vomit ceased, coma disappeared and also a slight hemiplegia. (42.)

Dr. Gray has for many years been in the habit of treating the *coma* which occurs in the height of febrile paroxysms, especially the violent

ephemeral attacks to which young children are liable, by the Tartar-
 emetic in doses of $\frac{1}{100}$ of a grain repeated every hour until the heat
 and coma abate. The presence of vomiting strengthens the indica-
 tion for the drug so much, as to make it advisable to give a smaller
 quantity, and at intervals of from a half, to a full hour longer. The
 very hot paroxysms of fever, occurring in the course of dentition,
 and especially such as are excited by errors of diet, and tend to the
 development of severe convulsions, have been much more satisfac-
 torily treated by this drug than by the Aconite, Belladonna, or Chamo-
 milla which he has often applied singly and seriatim as is the gen-
 eral practice in our school. The first sign of abatement in the fever
 or coma, is with him the signal for stopping the remedy. (42.)

In the first stage of *influenza*, generally of itself a fugitive state, he
 thinks it by very much the most strictly indicated, and on that account,
 as well as by his own experience in many hundreds of cases, the
 very best remedy that can be employed. The state against which he
 gives it is: lassitude, with great sensitiveness to cold, with chilly
 feelings, pasty tongue, headache, inflammation of the throat, tonsils,
 aches of the palate or pharynx, short turns of nausea, aching in the
 bones, especially of the lower extremities, yellowness of the skin,
 slight hoarseness, more or less fever-heat and sweats. The Anti-
 mony often acts as a perfect remedy in the stage of incubation, espe-
 cially in those cases which would of themselves close this stage by
 profuse watery diarrhœa and cramps. This stage of which the an-
 gina faucium, the chills, and the bone-pains are the prominent suf-
 ferings, subsides of itself in twenty-four to forty-eight hours; but the
 disease, if it be a real *influenza* is not removed; it has only advanced
 a step beyond the period of incubation towards the stadium of bronchi-
 tis, with its concomitant cough, dyspnœa, fever-sweats and prostration.
 The second or bronchial stage of the true *influenza* having been suc-
 cessfully managed by Phosphorus or Bryonia with the aid of Aco-
 nite and Hyosciamus, I complete the cure by a return to the Anti-
 mony; that is to say, when the air-passages are loaded with mucus,
 the cough frequent and the expectoration copious. (42.)

Frontal Neuralgia.—A young lady had a tearing pain in her right
 temple for six weeks, in consequence of exposure to a current of air.
 The pain commenced in the right temple, extended towards the eye
 and ear, and was so violent at night as to prevent sleep. She had
 also frequent flushes of heat and a hacking cough. She took two
 globules of the ninth dilution of Tartar-*emetic* and was cured in two
 days. (56.)

Eyes.—Disposition to press the eyelids firmly together. The eye-
 ball feels bruised particularly on touching it. Darting in the inner
 canthi and burning and smarting with redness of the conjunctiva.
 From the external application of the remedy, the coats of the eye be-
 come redder, and more sensitive, swell up, the ciliary vessels become
 turgid with blood. Frequently recurring scintillations mistiness and

vertigo on rising from a seat. (32.) Bruised pain in the eyeball. Tearing pains in the eye. Jerking and shooting in the inner canthi and pressure in the eyes. Burning and smarting in the eyes and canthi, with redness of the conjunctiva. Red, swelled, inflamed eyes (rheumatic ophthalmia?) and distention of the ciliary vessels with blood. (12.) Floatings before the eyes on rising from his seat. She sees as through a thick veil, with vertigo (for many days.) (64.)

Clinical Remarks.—It has been recommended in ophthalmia-rheumatica, and the above symptoms point to that affection, while the known anti-rheumatic virtues of the drug add a further confirmation of the propriety of using it in such cases. (12. 42.)

Amaurosis.—A blind woman was attacked with frequent cough, followed by vomiting of food. She took three globules of the third dilution of Tartar-emetic in a single dose; after which her cough and vomiting speedily subsided, and the amaurosis diminished so much, that she was able to walk without a guide. (57.)

It is one of the best homœopathic remedies in inflammation of the eyes accompanying or succeeding variola. We have employed it successfully in such cases at the second trituration. In pustules upon the eye-balls, or upon the eye-lids, it acts with promptness and efficacy. It is sometimes useful in chronic œzema affecting the eye-lids. In these instances it should not be prescribed below the second attenuation. (10.)

In *amaurosis*, Tartar-emetic has been highly extolled by the French physicians. They continue the remedy so as to keep up a slight degree of nausea. In England it has not sustained its character. M. Feavers states that although he gave it a full and fair trial he does not remember one instance in which it produced decided benefit. It is particularly recommended in amaurosis arising from a deranged state of the digestive organs. (42.)

In *purulent ophthalmia*, and in *inflammations and wounds of the eye*, Lallemand successfully employed Tartar-emetic in large doses. It proved effectual in several cases in which Mercury had previously failed. (44. 42.)

In *chronic ophthalmia*, and spots on the cornea a solution has been occasionally employed as a stimulant collyrium. (42.)

Ears.—Buzzing in the ears (the fourth day). (31.)

Nose.—Ulcerated nostrils. Bleeding. Sneezing. Fluent coryza, chilliness, deficient taste and smell. Coryza preceded by bleeding at the nose. (32.) Uncontrollable epistaxis. (12.) Violent sneezings followed by severe pains in œsophagus and lower part of the chest. (28.)

Clinical Remarks.—In a case of profuse *epistaxis* in a girl, aged twenty-four, which did not yield to other remedies, Dr. Jager gave two grains of Tartar-emetic in four ounces of water, until persistent nausea occurred without vomiting; her face became pale, the torpor lessened

and the bleeding ceased, followed by diarrhœa and perspiration; she remained well. (4. 11.)

This drug exercises a specific influence upon the mucous-membrane of the air-passages, producing among other effects, sneezing, fluent coryza, chilliness, loss of taste and smell, and irritation of the Schneiderian membrane. Experience has proved it useful in influenzas and ordinary catarrhs. It has likewise been successfully employed in hepatic, pustular, and other eruptions about the nostrils. In catarrhal affections we prefer the first trituration; but in chronic cutaneous disorders we usually select the third trituration. (10.)

Face.—Blue margins around the eyes, blue lips, pointed nose, irritated look and great paleness. Intensely painful drawing and dull pressure, and then dull pressure in the malar bone. Convulsive twitching of the muscles of the face. Spasmodic closing of the jaws. The lips are parched, scaly, cracked, excoriated, red. (32.)

Paleness of the face and of the entire body, (at the end of twelve hours.) Face livid. (58.) Variolus-like eruptions on the chin, attended with itching. (1.)

Clinical Remarks.—Porrigo, eczema, and hepatic eruptions of the face, are often relieved by the internal use of the sixth dilution of Tartar-etic. In a few cases of old hepatic affections of this part, we have observed benefit from the occasional employment of a mild unguent of this substance. (10.)

Mouth.—Dryness of the mouth. Aphthæ. Inflammation of the mouth and mucous-membrane of the tongue, with small pustules. Tongue moist and clear, grey or coated white. Tongue red, covered with raised papillæ. Tongue bright red, and dry in the centre. (32.)

Spongy gums as in scurvy. Tongue dry and red. Violent salivation. Dysphagia. (12.) The buccal cavity and the lips very much swollen. Excoriation of the buccal mucous membrane. The entire buccal cavity and the lips swollen and excoriated in places. (59.) Difficulty of protruding the tongue. Embarrassment of speech. (54.)

Clinical Remarks.—Dr. Maxwell advises Tartar-etic in cases of pyalism to be given in repeated doses, so as to keep the system fully under its influence. It is advised to be given largely diluted in *hot* water, and the action to be assisted by copious draughts of hot diluents. Two days are required to remove the pyalism. This method does not appear to have been so successful in the hands of others, as with Dr. Maxwell. (44. 42.)

It is appropriate in vesicular and pustular eruptions within and around the mouth, and in swelling and excoriation of the lips. High dilutions should be prescribed in such cases. (10.)

Pharynx and Œsophagus.—Violent sore throat. Disagreeable sensation about the palate. Pustules covering the mucous membrane of the pharynx and Œsophagus. Dysphagia, with difficult breathing. Left palate bright red, swollen, and covered with tenacious mucus and vesicles. Sudden swelling of the cervical glands and tonsils. Burning

heat in the throat. (32.) Difficulty of swallowing and of breathing in consequence of swelling of the isthmus of the fauces. (59.) Great sensitiveness of the œsophagus. Swallowing food causes pain. (28.)

Clinical Remarks.—It is homœopathic to swelling and redness of the throat, with large secretion of mucus, which often accompany epidemic catarrhs, influenzas, &c. Against pustular eruptions in the throat, whether arising from variola, or other cause, it is eminently worthy of attention. During convalescence from tonsillitis, erysipela-tous sore throat, and mercurial ulcerations of the throat, we have often employed it with marked success. (10.)

Appetite.—Disagreeable bad taste in the mouth. Metallic astringent taste. Food tastes flat. Foul qualmish taste. Canine hunger. Appetite good, but loathing supervenes after eating. Qualmishness; prostrate feeling. (32.) Anorexia. Coated tongue, bitter taste in mouth, and nausea. (12.) Desire for acids and succulent fruits. Distaste for smoking. Adypsia. Saltish taste. (28.)

Gastric Symptoms.—Frequent nausea with anxiety, accompanied with great dullness in the head. Nausea in repeated paroxysms. Constant nausea, vomiting, and diarrhœa. Eructations. Cramps and cutting pains in the abdomen, with urging to diarrhœa. Chilliness and watery diarrhœa. (32.) Violent vomiting of bilious matters. Violent pain at epigastrium, and on whole abdomen, with spasmodic contraction of abdominal muscles. (12.) Futile efforts to vomit. Severe nausea and vomiting during the entire night, and after twelve hours four stools, (from fifteen grains). (58.) Vomiting of mucus and bile. (55.) No vomiting (from fifteen centigrammes.) No vomiting (from one grain and a half.) (45.) No vomiting (from five centigrammes.) (2.) Neither vomiting or stools (from five centigrammes.) (45.) No vomiting or diarrhœa (from fifty centigrammes in aqueous solution.) (59.) Vomiting accompanied by anguish. (21.)

Clinical Remarks.—The higher attenuations of this medicine are exceedingly valuable in a large class of gastric derangements. It is especially indicated in the nausea and vomiting which accompany chronic gastritis and other conditions of the stomach characterized by a loss of nervous energy, and an enfeebled and irritated state of its mucous membrane. It is appropriate in nausea, oppression and tightness in the epigastric region, heaviness of the head, distaste for food, and lassitude, accompanying dyspeptic and bilious affections. (10.)

Stomach.—Audible shifting of flatulence. Oppression at the pit of the stomach. Putrid eructations, disposition to vomit. Violent spasmodic vomiting. Ineffectual retching. Cholera morbus with vomiting. Vomiting followed by great languor, drowsy and weary feeling, loathing, pale and sunken countenance. Unpleasant sensation of warmth and burning in the region of the stomach. Inflammation of the stomach. (32.) Vomiting of matter tinged with blood. (12.) Precordial anxiety after eating. (55.) Pain at the epigastrium. (69.) Burning heat in the epigastric region. Burning heat in the stomach.

(45.) Cramps in the stomach. (2.) Pains in the region of the stomach, which increase so much as to cause syncope. (54.) Epigastric region swollen and painful. (45.) Rotary movement at the epigastrium in the evening on lying down, with very strong and rapid pulsations of the heart. These symptoms returned every evening and continued until perspiration commenced. (1.)

PATHOLOGY.—Inflammation of mucous membrane of stomach and intestinal canal. Where the gastric membrane was most inflamed, there were two or three white spots, size of a split pea, appearing under the glass as spots of commencing ulceration. (12.) M. Cloquet cites a case in which was found inflammation of the stomach and duodenum, red spots in the colon, and blackish spots in the lungs, extending to various depths into its substance. (42.)

Mucous membranes of the stomach and intestines unusually pale. Peritoneum of a brick red all over. (2.) Stomach and bowels distended with blood. The mucous membrane of the stomach (except in the cul-de-sac) was red, swollen, and exhibiting a viscous covering which could be easily seen. Gangrene of the coats of the stomach. (1.) Magendie asserts that the redness and inflammation of the stomach caused by Tartar-emetic should be referred to the specific influence which it exerts over the stomach, independent of its direct local irritation.

Clinical Remarks.—In subacute inflammation of the stomach with moderate tenderness on pressure, distention, pain, and burning heat, especially on taking food or drinks, and frequent attacks of nausea and vomiting, loathing of food, and rapid beating of the heart and arteries on lying down or moving about, this remedy at from the third to the sixth attenuation has always proved useful in our hands. In relaxed and enfeebled states of the mucous membrane of the stomach arising from excesses in eating or drinking, it is often applicable. The following symptoms are particularly characteristic: Oppressive sense of weight and distention of the stomach, nausea, loathing of food, putrid eructations, precordial anxiety, faintness, and burning heat in the epigastric region after eating. It cures nausea and vomiting caused by the sudden disappearance of cutaneous eruptions. In these instances infinitesimal doses should be prescribed. (10.)

Dr. A. Leon has found it useful in the vomiting attendant on *cholera infantum*, given at the sixth dilution.

Abdomen.—Cutting and sticking pains throughout the abdomen. Abdomen sensitive to contact. Swelling at the epigastrium. Pain in the epigastrium and hypogastrium, increased on pressure. Violent colic. Great fullness in the abdomen. Meteorismus. (32.) Inflammation of the bowels. Abdominal colic continuing for many days. Rumbling of wind in the intestinal canal. (55.) Alternate desire to vomit and go to stool—sometimes one and sometimes the other desire predominates, and produces a state of spasm in the bowels which is relieved by eructations or emission of flatulence. (31.)

PATHOLOGY.—Mucous membrane of the intestines unusually pale. Bowels distended with blood. Mucous membrane of the duodenum red, swollen and covered with a viscous coat. (2.) Mucous membrane of the intestines red, and the blood-vessels turgid with blood. (2.)

Clinical Remarks.—After dysenteries, cholera infantum, cholera and other bowel-complaints, and abdominal typhus, we often meet with a condition of the intestines which requires the employment of this remedy. Among these phenomena we enumerate, great prostration of the vital forces, frequent cold sweats, colic pains in the abdomen, distention of the bowels, and tenderness on pressure, nausea, diarrhœa, borborigmus, putrid eructations, rapid and weak pulse, and general feeling of *malaise*. In these cases imponderable doses should always be used if we desire to witness beneficial effects from the remedy. (10.)

Stool.—Light, brown, yellow, diarrhœic stool. Uninterrupted watery evacuations. Colliquative diarrhœa with meteorism. Involuntary diarrhœic stool. Palpitation of the heart, during the diarrhœa. Tenesmus. Bloody stools. Burning at the anus after stool. Violent stitches through the rectum and abdomen. Heat and burning in the anus. (32.) Constant involuntary watery stools. (12.) Diarrhœa and vomiting. Watery diarrhœa, vomiting and sweats. (55.) Very fœtid diarrhœic stools. Sanguineous stools. (65.) Constipation for many days from infinitesimal doses. (1.)

Clinical Remarks.—Tartar-emetic has been highly spoken of by Dr. Billing and other allopathists in the treatment of cholera, but the small number of recorded cases in which it has been employed is hardly sufficient to warrant an unqualified opinion on the subject. It has been observed that the mortality under the use of Tartar-emetic was only nineteen per-cent., whilst under Mercury it was thirty-six per-cent., and under stimulants fifty-eight per-cent. In the Droitwich Lunatic Asylum twenty-one cases were treated with an Antimonial-emetic at the commencement, followed up by one grain of Opium every hour; the number who died were only four or nineteen per-cent.; twenty-six other cases were treated with Calomel, Opium and stimulants, omitting the emetic, of whom seventeen died, or sixty-six per-cent. Mr. Littleton of Saltash was in the habit of dividing half a drachm of Tartar-emetic into five grain doses, and gave one every twelve minutes until the vomiting ceased. (!) He highly applauds the Tartar-emetic treatment, and many writers have spoken of it in favorable terms, (44.) (See toxicological effects, p. 391.)

In cases of *strangulated hernia*, Tartar-emetic has occasionally been used for the purpose of relaxing the muscular system, and facilitating the return of the bowel. It is rarely advisable, and is inferior in efficacy to either Chloroform or Opium. If used it should never be given in sufficient doses to excite vomiting, as the violent action of the abdominal muscles would inevitably increase the mischief. (44.)

Tartar-etic is unquestionably homœopathic in certain choleraic groups of symptoms, like frequent vomiting and purging of watery fluids, cold sweats, general sinking of the vital forces, &c., but in order to obtain successful results from its use, it must be prescribed in attenuated doses. When the strength is rapidly failing under these exhausting discharges life hangs as it were, by a thread, it would be madness to administer crude doses of a drug as active as this. The primary effect of such doses would without doubt, turn the scale against the patient. In these instances we can only do good by stimulating the flagging vitality of the affected tissues with attenuated atoms of the remedy. (10.)

In *obstinate constipation*, dependent upon the absence of mucus to lubricate the intestines, Tartar-etic sometimes produces relief. Dr. Nevins, a homœopathist, mentions the case of an old man, who had no evacuation from the bowels for eleven days, notwithstanding the employment of purgatives of every description and of enemas. He administered the salt in doses of a quarter of a grain every hour with Sulphate of Magnesia. He was constantly nauseated by it, and in six hours passed a mass of hardened fæces, after which he had no further ailment. (44. 42.)

This allopathic employment of large doses of this drug in conjunction with Sulphate of Magnesia, may, in some instances of constipation, afford temporary relief; but the reaction which must necessarily result from such medication will always be productive of ultimate injury to the patient. A drug action upon the intestinal mucous membrane so violent as to force out a large secretion of mucus within the space of a few hours, will always be succeeded by a loss of vitality, and a more or less impaired condition of the function of the part. Such an application will never be resorted to by the homœopathist, when he has at his command so many homœopathic specifics against constipation. He cannot be injured by being made acquainted with the empirical uses of the medicine in the hands of the other school, but he should fully appreciate its remote as well as its primary effects. (10.)

Hahnemann has included constipation as one of the effects of infinitesimal doses, but this symptom is not sufficiently confirmed to render it of much importance.

We have often prescribed it with advantage during the progress of dysenteric affections, after the mucus and bloody discharges and tenesmus have nearly subsided, and the patient continues very weak from frequent brownish, and slightly sanguineous discharges, accompanied by nausea and occasional vomiting. There we usually employ the third trituration.

At the sixth dilution, it is an admirable remedy in obstinate cholera infantum, when the discharges are very frequent, and watery, with constant vomiting, cold sweats, and great prostration. In some cases of this kind, we shall witness happy responses, after Arsenicum, Veratrum, and other similar remedies have failed. The

experience of Dr. Leon, (of New-York) in these cases coincides with our own. (10.)

Chest.—Short, difficult breathing. Want of air. Nocturnal orthopnœa. Attacks of unequal intermittent breathing during sleep. Unusual oppression of the chest. Paroxysms of sore pain in the chest. Palpitation of the heart; also during diarrhœic stool. (32.) Respiration short and labored, without stertor. Hæmoptysis. Frequent cough, expectorating frothy, sanguineous sputa; mucous and subcrepitant râle, and dull percussion over summit of right lung; heat in chest and dispnœa; pulse frequent and strong. (12.) Titillation in the larynx, producing cough; rattling of mucus. (12.) Palpitation of the heart. Dilatation of the heart. Difficult and short breathing, obliging him to sit up in bed. Velvety feeling in the chest. (1.) Great difficulty of breathing. Constriction of the chest. Short, dry, and painful cough. Painful respiration. Respirations sound rough. Pressure and contraction of the chest. (12.)

PATHOLOGY.—Magendie, speaking of the effects, says, “the *lungs* present the appearance of the greatest alteration; they are of an orange color, if the animal is young; violet, if it is older; the tissue is hepatized, gorged with blood at some parts, and at others very analogous to the tissue of the spleen.” (12. 42.) Inflammation of the lungs. Hepatization of the lungs. (2.)

Clinical Remarks.—*Pneumonia.* According to Magendie, it acts specifically in inflaming the lungs and the mucous membrane, which lines the intestines from the cardia to the anus. Lepuletin also remarks, “its effects on the respiratory organs are, to produce dyspnœa in dogs, which were in perfect health before its administration, the lungs were found hepatized had lost their color and scarcely crepitated at all. One would imagine, that, admitting its action in man to be similar, far from being useful, its administration would be particularly pernicious in pneumonia, but it is not so, for far from favoring engorgement of the lung, it induced its resolution.” (42.)

Magendie arrives at the following conclusions: In large doses it excites little well marked action, (in consequence of the nervous system being overwhelmed by the amount taken?) sometimes scarcely any vomiting or alvine evacuations. In smaller doses, six to eight grammes, (ninety to one hundred and twenty grains,) vomiting, diarrhœa, difficult respiration, rapid pulse, and slight trembling take place; the respiration becomes more difficult, the pulse irregular and intermittent, salivary secretion increased, and then inquietude and death. The larger the poisonous dose, the more the action is confined to the lungs; the small doses produce greater effects on the alimentary canal. Rayer mentions that he poisoned a number of animals, but without finding any trace of affection of the lungs. These accounts show great discrepancy, but experiments instituted to test these discrepancies have shown that in those animals poisoned slowly, inflammation of the lungs, bronchi, &c., was always well marked; but in

other animals poisoned more quickly by larger doses these appearances were less marked according to the rapidity of their death. M. Malin, Jr., who made these experiments, states that though it has been alleged that Tartar-emetic has no elective action on the lungs, that fact has nevertheless been indisputably demonstrated; he cannot say, however, that it produces pneumonia, that is, not in all three degrees, but that it produces pulmonary lesions similar to the pathological lesions characterizing the two first degrees of pneumonia there is no doubt. Another point of some importance as accounting in a measure for the great efficacy of Tartar-emetic in pneumonia with bronchitis and abundant expectoration, is the intense trachea-bronchitis developed along with the pneumonia by Ant.-tart., and sometimes a very abundant mucous exudation. This bronchitis is observed especially in the inflamed portion of the lung, and the inflammation of the bronchial tubes is observed in cases where the animals die before the pneumonia has time to be developed.

He accounts for the discrepancy existing between MM. Magendie and Rayer in regard to its producing inflammation of the lungs, by showing that the latter, who denied it, experimented with such large doses, that the animals died before the inflammation had time to be produced, whereas the former by using smaller doses, enabled the poison to produce its specific effects on the lungs. Dr. Malin seeing the want of further experiments upon the healthy to complete our pathogenesis of this drug, instituted the following experiments upon himself.

1st. Being in good health, pulse sixty-four, took in the morning five milligrammes (about $\frac{1}{12}$ of a grain) of Tartar-emetic in water. This dose was repeated for five days without perceptible effect. Sixth day felt nothing until about four o'clock; the respiration then appeared a little less free. Feeling no further effects, and appetite continuing good, took on going to bed a dose of one centigramme (about $\frac{1}{60}$ of a grain.) The night was passed in a restless manner, sleep being interrupted by a fatiguing heat; impelled to drink several times and respiration slightly impeded. On rising, general uneasiness, weariness, as after a febrile fit, and clammy mouth. Took at eight in the morning $\frac{1}{6}$ of a grain. No appetite. Slight breakfast without relish. All day was in same state. About five P.M. greater uneasiness, especially about the epigastric region; nausea, desire to vomit, but without result; respiration more impeded; short dry cough, rather frequent; great thirst; heat in the head; white tongue; drinks appear too sweet; clammy mouth; two loose evacuations during the day; palpitation of the heart; bruised feeling and general weariness, compelling him to go to bed at eight o'clock. The ear applied to the chest gave evidence of nothing abnormal, except that the respiration appeared much too rough. At nine o'clock he took another dose of five milligrammes. Agitated sleep, difficult respiration, feeling of pressure on the chest during sleep. At five A.M. was awakened by a violent rigor, lasting twenty minutes, and followed by heat; the pulse which

had been little affected during the two previous days, increased to seventy-eight beats, full and strong; skin hot; face red; thirst urgent; heat in the head; pretty strong palpitation of the heart; slight burning at the stomach, fullness and inclination to vomit; respiration very much impeded; feeling of pressure and constriction of the chest; cough frequent and a little moister. On auscultation, the respiration appeared rougher than the previous evening, and deep inspiration was accompanied by slight pain under the left nipple. Night very agitated; nightmare; disagreeable dreams. He felt much the same in the morning, as he had the previous day, but deemed it advisable not to carry the experiment farther. During the subsequent days the following symptoms occurred: The tenth day no stool, towards evening pulse seventy-two; respiration somewhat less difficult; cough the same; hardly any pain in the side; great thirst; a good deal of uneasiness; no inclination to vomit; night a little less restless. The eleventh day a little less roughness of respiration on auscultation, cessation of the pain, pulse nearly normal; skin still hot, thirst less, uneasiness diminished, appetite in part returned; respiration still obstructed; cough a little less; the night more tranquil. Twelfth day appetite; breathing nearly free; the cough continues; still a little uneasiness; scarcely any thirst; tranquil night. The symptoms continue to diminish the subsequent days, so that by the eighteenth there remained no trace of indisposition except slight cough, which persisted some time longer.

Three months subsequently he undertook a second experiment for the purpose of verifying the first.

2d. "During eight days I took each morning five milligrammes of Tartar-emetic (about $\frac{1}{12}$ of a grain) without feeling anything. The ninth day at eight P.M. took another dose of one centigramme, about $\frac{1}{6}$ of a grain, night somewhat disturbed; the respiration appeared somewhat less free, but that was not very distinct. The tenth day on rising a little uneasiness; I again took one centigramme. During the day had some uneasiness; mouth clammy; little appetite, breathing impeded. About ten P.M. took another dose of five milligrammes; sleep very disturbed and towards morning uneasiness, especially at the epigastria; some nausea; loss of appetite; respiration impeded; a watery stool at night; great fatigue, urgent thirst. From the morning of the eighth day the cough appeared, and went on increasing; it was short, painful and frequent; auscultation gave no results. At nine A.M. one centigramme was taken. In the course of the day a rigor which lasted half an hour, with burning in the head and beating of the heart; thirst, inclination to vomit; pulse eighty and strong; skin hot; cough dry and painful; considerable difficulty of respiration; sensation of a weight on the chest; auscultation shows rough respiratory sounds; general bruised feeling. This state continued all day, and night was very much disturbed by strange dreams. There were two watery stools during the twenty-four hours. The following days the symp-

toms declined, but more slowly than the first time, so that by the twenty-fifth day he had not entirely recovered his health." (12. 42.)

Lohmeur observed the following symptoms on four persons, workmen in a manufactory where were prepared large quantities of Tartar-emetic, butter and glass of Antimony, and powder of Algaroth:—Headache; difficulty of breathing; stitches in the side; plunging pains in the back; mucous and sibilant râles; abundant perspiration; general depression; anorexia; diarrhœa; dysuria with flow of mucus from the urethra, causing a painful sensation; flaccidity of the penis, dislike of coition, and even complete impotence; pustules on different parts of the body; chiefly the thighs and scrotum; pains in the testicles. Fourcroy observed in fifty persons exposed for twelve hours to the fumes of sulphuret of Antimony impregnated with nitre, great difficulty of respiration; constriction of the chest; dry cough; hæmoptysis; colic and diarrhœa. (12. 42.)

Theory of its action in pneumonia. Dr. Scott remarks: "Though there is quite sufficient in the observed effect of Antimony to show that it bears a strictly homœopathic relation to pneumonia, and therefore to warrant the belief that it is in virtue of that power that it has proved successful in that disease, yet when we consider its acknowledged sedative and depressing effects, and the very large quantities which have been employed in pneumonia, may we not suppose that it has often acted as a continued palliative, which by keeping the circulation sluggish, has, as it were *starved out* the disease, while at the same time, its specific action on the lungs has not been prevented? It seems unquestionable that *large* doses of Tartar-emetic have been most useful, and this may explain the fact that it has proved more efficient with the dominant school than with homœopathists. (12. 42.)

The employment of large doses of Tartar-emetic in pneumonia, and in the treatment of acute inflammation, was introduced by Rasiori, in 1808. His success was reported to be so great, that Laennec was induced to make trial of the system, and he was no less successful, especially in the treatment of pneumonia. Of sixty-two unequivocal cases of pneumonia; only six died, two being moribund on admission, two were old men of seventy, with cerebral congestion and pleurisy, and the other two with disease of the heart. His plan of treatment was as follows:—If the patient was young and robust, he was bled; if old and debilitated, this was omitted. He then administered one grain of Tartar-emetic in infusion of orange-leaf, every second hour for six times. After this the patient was left quiet for seven or eight hours, if inclined to sleep and the symptoms were not urgent. If the inflammation had already made much progress, the same dose was repeated, until there was decided improvement. After the first few doses a tolerance of the medicine was established, none of the usual effects of the medicine being experienced twenty-four hours after its first administration. A decided improvement soon followed the establishment of this tolerance in the

system. Subsequently, however, Laennec omitted the bleeding, in his treatment, and confined himself solely to the administration of Tartar-emetic, in most cases combined with Opium. Laennec's method, with considerable modifications has been recommended by some of the highest English and continental authorities. Drs. Graves and Stokes of Dublin, commenced their treatment with a full bleeding, and administered six grains of Tartar-emetic in divided doses, in the first twenty-four hours. To this they added two to three grains daily afterwards, as the urgency of the case might require. Under this treatment a cure was effected in a majority of cases. Schönlein recommends the use of the Cinab. in all cases before the exhibition of the salt, and it is not even then given if the inflammatory symptoms have not in a measure subsided. He directs two to six grains to be dissolved in as many ounces of water, one-half to be taken at once, the remainder in table-spoonful doses hourly until improvement. (44. 42.)

In the pneumonia of children this active treatment is somewhat modified. Dr. West observes, Tartar-emetic is a remedy of great value, but I can by no means subscribe to the unqualified recommendation of it by some French physicians, in all the forms and stages of the disease. The cases in which it seems to me to be of the greatest use, are those in which the pneumonia develops itself out of previous catarrhal symptoms, or in which it supervenes upon measles or hooping cough. In such cases Antimony given in doses of a quarter of a grain, to a child two years old, and repeated every two minutes till free vomiting is produced and afterwards continued every two or three hours for forty-eight or sixty hours, has often appeared to me to be of the most essential service, and the preservation of the patient's life has seemed in several instances due to its use. In pneumonia, too, which has not been preceded by catarrhal symptoms, if, after venesection, the respiration still continues as hurried as before, and the condition of the patient has been apparently but little benefitted by the measure, Tartar-emetic has proved extremely useful. He has been in the habit of giving it in large doses, as a fifth of a grain to a child two years old, and repeating it every two hours for twenty-four hours, and have observed its use to be followed by a great diminution of the frequency of the respiration and by considerable relief to the patient. In no instances, however, in which the pneumonia has been neglected, so that the period of depletion was passed, nor in which bronchial respiration was audible, have I seen beneficial results from the employment of large doses of Antimony as recommended, by the French physicians. (44. 42.)

But while all this indicates that Tartar-emetic is the one great remedy in pneumonia, the specific in fact, yet there are some cautions to be observed in its use; cautions, however, less applicable to homœopathic practitioners than to those of the dominant school, who following Rasori and his pernicious doctrines, have doubtless caused many a patient to succumb under their overwhelming doses, who

under a less heroic treatment would probably have made an easy recovery. Dr. Boling who has used the remedy extensively at the South, in the treatment of pneumonia, states that its administration is by no means unattended with danger. He has frequently seen alarming and fatal symptoms supervene upon its continued use, and carry off the patient when the disease seemed really to be progressing most favorably. "It is not," he says, "merely its local action, to which it is my object to call attention at present, but more particularly to an array of symptoms of a violent and sudden character, connected seemingly with a metastasis of morbid action, from the thoracic to the abdominal viscera and which is invariably a condition of extreme danger. The patient may seemingly be doing well under the continued use of the remedy; the dullness on percussion and the frequency of the pulse diminishing, the skin perhaps becoming moist, and the respiration improving. Suddenly in some cases, in others somewhat gradually, the patient becomes restless, the thirst is augmented, the discharges from the bowels are more numerous and thin, the abdomen becomes tympanitic and perhaps tender, the tolerance is lost, and though he may not have done so for several days, he vomits, or makes frequent efforts to do so; the tongue becomes dry and pointed; there is jactitation present, anxiety of countenance, delirium, and perhaps stupor, a short time before death. Occasionally jaundice supervenes, and in a few cases the matter vomited bears a close resemblance to that ejected in yellow fever. During the progress of the change the pulse becomes more frequent, hard, concentrated, small and thready."

The rapidity with which these symptoms are developed varies; death has sometimes taken place in six hours from the first unfavorable change. It is oftener protracted to ten or twelve hours. With the change spoken of, occurs an almost total subsidence of the original disease. "From a state of almost complete solidification of one lung, with dullness on percussion, and bronchial respiration, in the course of four or five hours I have found the pulmonary tissue permeable, the chest resonant and yielding a healthy respiratory murmur; a corresponding improvement in the cough, thoracic pain, difficulty of breathing, &c., proceeding at an equal rate. The rapidity with which this change in the condition of the lung takes place is proportional to the violence and rapidity of the newly-developed abdominal disease. Therefore he says that in any case of pneumonia under the antimonial treatment, although the patient may seemingly have been doing well, the supervention of the slightest tympanitis, with augmented thirst and a tendency to diarrhœa, may be regarded with suspicion, as the probable precursors of a very grave condition; and he is now led to regard every patient's doom as almost settled, when in addition to these symptoms, there is a rapid instead of a gradual removal of the dullness on percussion, unattended with the crepitant râle of respiration. When a case is closely watched, the latter will be found to precede somewhat the former symptoms of the progressing change;

and he has more than once surprised, not only the relatives of patients, but professional gentlemen in attendance with him, by announcing a coming change for the worse." This termination of pneumonia he cannot believe to be a rare occurrence, especially at the South, where the liability of the gastro-intestinal mucous membrane to irritation is much greater than with us. (17. 42.)

When a practitioner of the old school we treated many cases of pneumonia according to the method of Rasori, and our experience fully confirms these observations of Dr. Boling. We can call to mind several instances where patients appeared to be rapidly convalescing—the cough, respiration, expectoration, pain, sounds on percussion and auscultation, &c., all improving, when a sudden diarrhœa, with very rapid and weak pulse, cold and clammy skin, and excessive prostration would supervene, and in a few days terminate fatally. In other instances typhoid symptoms were superinduced, which were equally unmanageable.

That many patients have been actually destroyed by Tartar-emetic administered after Rasori's method, we entertain no doubt. What is termed "tolerance" of the drug by Rasori, Laennec, and others, means simply that there are persons possessed of such vigorous constitutions as to be capable of resisting for a time the injurious effects of both pneumonia and the enormous doses of Antimony; but if those who have been sent out of the world prematurely by this method of practice could speak, their name would be "Legion." No one can determine before-hand in any given case whether or not this "tolerance" obtains. The most experienced physician cannot decide without trial, whether the pneumonic symptoms will subside kindly under the remedy, or whether fatal vomiting, purging, and prostration will ensue. Under this mode the patient runs a fearful gauntlet—stricken on one side by the malady and on the other by the herculean remedy; and if he possesses sufficient "tolerance" to survive after such handling, he may deem himself a fortunate mortal—favored by all the gods in the calendar. (10.)

But it is only against this inordinate and indiscriminate dosing that we contend. The homœopathic relations of Tartar-emetic to pneumonia are of high importance, as has been proved by its pathogenesis and pathology. Thus, short, difficult and oppressed respiration, frequent, short, dry and painful cough, with expectoration of frothy, sanguineous sputa (rusty expectoration), dull sound on percussion, mucous and subcrepitant râle, pressure and constriction of the chest, rapid and strong, or rapid and feeble pulse, febrile symptoms, and hepatization, present an excellent simile to a certain form of pneumonia, and ample clinical observation has confirmed the utility of the remedy. But in order to avail ourselves of its full benefit, it must not be employed stronger than the first, second and third attenuations. With these minute doses the requisite curative impression can be produced upon the affected lungs with certainty, promptness and safety. (10.)

Dr. Ozanne of Paris, speaking of the action of this remedy in pneumonia says, "this medicine, so freely used by the allopathists, and to which many of their cures are due, is of great service, especially in the decline of the inflammation of the lungs; it appears to me to be suited to the particular state in which the bronchi or pulmonary vessels are full of a thick viscid secretion which the patient finds it difficult to expel, when that substance is no longer tinged with blood. Hence it seems most appropriate in pneumonia, during the resolution of hepatization, and in bronchitis, when, at the same time that the breathing is difficult, there is a subcrepitant or mucous rattle in the lungs. This condition is often accompanied by fits of suffocation, with spasmodic cough. In such cases Tartar-emetic gives very rapid relief. I usually prescribe the first trituration. This in pneumonia does not cause vomiting in children, but if given for simple bronchial catarrh, every spoonful of a solution of one grain of the first in four ounces of water may cause vomiting. In such cases it is proper to weaken the solution." (12.46.)

CASE 32.—In the case of a man, seventy-three years of age and habitually intemperate, affected with a double pneumonia, I gave one grain of the pure salt in four ounces of water, one dessert-spoonful every two hours, when his state seemed almost hopeless. Though affected with chronic heart-disease, and continually delirious during eight days, he recovered, and on the sixteenth day was able to walk out few steps." (12.)

In *Hæmoptysis*, when it is connected with phthisis, Dr. Cheyne states that he considers Tartar-Emetic far superior to any other remedy, especially if any inflammatory symptoms are present. (44. 42.)

Larynx and Trachea.—Feeble voice. Burning under the sternum. Cough and sneezing. Titillation of the larynx, inducing cough. Cough with vomiting of ingesta. (32.) Mucus râle in the bronchi with oppression. Eating excites cough and vomiting of food and glairy mucus. Cough with expectoration at two o'clock in the morning. Short, hoarse cough, caused by tickling in the middle of the larynx. Heat and sweats on the forehead when coughing, which is very fatiguing. (1.)

PATHOLOGY.—The larynx and trachea covered with large pustules, depressed in the centre. Mucous membrane of the larynx and trachea red and injected. (2.)

Clinical Remarks.—The indications for this remedy in *croup* are (besides its physiological effects) based on the predominating symptoms of a partial paralysis of the pneumo-gastric nerve. The short, hoarse, nearly suffocative breathing is accompanied by a whistling noise, heard even at a distance, whilst the thorax expands only with the greatest muscular effort, and the greatest anxiety and uneasiness, together with great prostration are manifested. The head is thrown backwards; face livid and cold; the forehead and sometimes the whole body are covered with a cold sweat; pulse small and very

much accelerated, or depressed and slow; drinking causes great difficulty, both owing to spasm and incomplete contraction of the muscles of the throat. The remedy should be administered in strong doses, repeated every hour or half hour. The effect is a remarkably rapid diminution of all the symptoms, without producing diarrhœa, vomiting, or a profuse sweat. The children fall into a gentle sleep in two or three hours, breathe freely, cough easily and loosely, expectorate a thick, lumpy, greenish mucus, their skin becomes moderately warm, and the pulse becomes small, weak, and mostly remarkably slow. (Quarterly Hom. Journal.) (46.)

In *hooping cough*, a popular remedy is an aqueous solution of Tartar-*emetic*. It is stated to be very efficacious. (44. 46.)

In *croup*, the Tartar-*emetic* in watery solution applied in all states prior to the deposition of plastic lymph, (diphtherite) is said by Dr. Gray to be safer practice than the Acon., Sponge and Hepar, hitherto so much, and in his opinion, unjustly lauded in our books. (46.)

Our experience with this remedy in croup has been considerable, and we believe it to be more generally applicable than any other medicine. It is chiefly indicated in the ordinary inflammatory, and in the spasmodic varieties previous to any exudation of plastic lymph. We have administered it frequently both in appreciable and imponderable doses, and have witnessed curative effects from both modes of administration; but our cures have been more prompt and satisfactory with frequent doses of the first trituration than in the sixth, twelfth, or thirtieth dilutions, (all of which we have occasionally used.) In the first stages of inflammatory or spasmodic croup, with hoarse, barking cough, rough and hoarse voice, great painfulness of the larynx, with danger of suffocation when touching or turning the throat, when coughing, talking, or taking breath, bright redness of the throat, spasmodic constriction of the throat, whistling and laborious respiration, wheezing and rattling in the larynx and bronchial tubes, the use of this drug in alternation with Belladonna are our most reliable remedies. In cases of this kind, Belladonna has not hitherto received due attention and appreciation. A glance at its pathogenesis, however, will show its homœopathicity to a great majority of the cases which occur in practice. We believe that the seasonable employment of these two drugs will promptly break up fifty per cent. of all the cases of croup which occur. (10.)

Another malady in which these two remedies in alternation have proved eminently serviceable, is *hooping-cough*. It is best indicated when the paroxysms of coughing are accompanied by vomiting, diarrhœa, great weakness, rapid and feeble pulse, cold and clammy skin, great tenderness and irritability of the larynx and trachea, and flushed face. Several French physicians have used Tartar-*emetic* at the 6th and 12th dilutions in cases of this kind, with marked success, but our experience inclines us to prefer the 1st and 2d triturations. (10.)

It is one of our best remedies in many of the coughs which accompany measles. Alternated with Aconite from the commencement of

the malady, it generally serves to ward off serious symptoms and to conduct the case to a speedy and happy termination. (10.)

During the progress of epidemic influenzas, after the head symptoms have been subdued by Nux and Arsenicum, and the malady has descended into the larynx, trachea, and bronchial tubes, this remedy, either alone, or in alternation with Nux, or Aconite, may often be prescribed with great efficacy. Medical men are so familiar with its therapeutic properties in such cases as to render any special indications for its employment superfluous. (10.)

Groups of symptoms occasionally appear during the course of acute and chronic bronchial affections which require its use. A few of these symptoms are, severe paroxysms of coughing, with rattling of mucus in the bronchi, difficult breathing, palpitation of the heart, nausea, vomiting, hoarseness, weakness, easy perspiration, cough aggravated by eating, speaking, inhaling cold air, or by lying down. Repeated doses of the 1st trituration rarely fail in affording prompt relief in such instances. (10.)

The following observations respecting this drug, by eminent old-school authorities are here enumerated as matters of record. Such experiments, although empyrical in their character, now and then afford useful hints to the practitioner of homœopathy. (10.)

Tartar-emetic in the treatment of *croup* is a remedy of great value. Dr. Cheyne speaks of it in the highest terms. He regards it as the only medicine entitled to confidence in the second stage of croup, and adds, that given in doses so as to produce continued nausea, it has been his sheet-anchor for thirty years. In the first stage he also employs it, directing it to be taken every half hour or hour, until it produces slight nausea, and afterwards hourly so long as inflammatory symptoms continue. Dr. Stokes also bears witness to the efficacy of this treatment. The patient should be kept in a warm room, in an equal temperature, and hot fomentations to the throat greatly add to the resolution of the attack. (44. 46.)

In *diphtheritis*, the same plan of treatment is attended with the best effects; in both these affections most practitioners place their chief reliance on Merc. (44. 46.)

In *scrofulous laryngitis*, Tartar-emetic is often highly serviceable. It should be continued so as to produce slight nausea without vomiting. (44. 46.)

Mammæ.—We are not aware that Antimony exerts any direct influence over these glands. It is probable that any therapeutic effect which may have been observed from its use is attributable to its action upon the circulation, the skin, and as a general depressor. As a remedy, therefore, in affections of these structures, it must be ranked as antipathic. (10.)

Clinical Remarks.—In inflammation of the *mammæ* after delivery, it is very efficacious, the symptoms often subsiding entirely under its use. It should be employed for some little time. (44. 46.)

Urinary Organs.—Sharp stitches in the region of the kidneys. Burning from the rectum through the urethra. Violent pressure on the bladder, scanty emission of urine, slightly tinged with blood, accompanied with pain in the bladder. Inflammatory red urine, depositing bloody red filaments when standing. Dark brown turbid urine. Watery urine with mealy sediment. Urine leaving white spots, (antimonial urine.) Increased secretion of urine. Burning after micturition. (32.)

Very severe lacinating pain in the lower part of the bladder, similar to that caused by calculous affections, (third day.) Severe burning in the urethra after urination, (third day.) (64.) He wakes in the night with great thirst and urgent desire to urinate, but passes but little urine, (second night.) (31.)

Clinical Remarks.—Dr. Barlow recommends the use of Tartar-emetic in the acute forms of *nephritis*. He considers that it is a remedy suggested by the nature of the affection, and calculated to fulfill the most important and obvious indications, viz, equalizing the circulation, subduing the inflammatory action, and restoring the functions of the skin. It is not to be used to the exclusion of other remedies. He relates several cases in which the use of the remedy was attended with decided benefit. (44. 46.)

Male Genital Organs.—Pustules. Constant sticking pain in the posterior portion of the urethra. (32.) Dysuria with a flow of mucus from the urethra, causing a painful sensation; flaccidity of the penis; dislike of coition and even complete impotence; pustules on the thighs and scrotum and pains in the testicles. (12. 46.)

Clinical Remarks.—Porrigo, eczema, and herpes are quite prone to attack the penis and scrotum, the itching and burning which they occasion are often almost intolerable. One of our most efficient remedies in these cases is a high attenuation of Tartar-emetic. It may often be succeeded or alternated with the 12th dilution of *Oleum-tiglium*, with much advantage. Administered at the 1st trituration, it has occasionally cured obstinate gleets with promptness. With the same trituration, given nightly for several weeks, we have cured two cases of involuntary emissions which had occurred as often as once in twenty-four hours for many months. (10.)

Tartar-emetic as a remedy for *syphilis* is recommended by Dr. Smee; he employs it every four hours in the primary and secondary forms. If much debility exists he also uses iron or zinc. It has also been extensively used by Dr. Willebrand of Finland. Cases of primitive chancre were cured by its internal use alone, in from ten to twenty days; no application having been made to the sore but simple water dressing. In a few cases where there was much induration, a cure was not effected. In thirty cases of secondary syphilis, all symptoms of the disease disappeared in from eleven to fifteen days. (46.)

Syphilitic eruptions rapidly and easily yielded. Mercury in every

form was avoided. Cleanliness, repose, and a regulated diet were the only other means employed. (44. 46.)

In acute orchitis, Tartar-emetic has often a marked effect in reducing the swelling and relieving the pain. It should not be used to the exclusion of other measures. (46.)

Mr. Milton advises Tartar-emetic to be given in bubo every second hour until a marked effect is produced upon the inflammatory swelling. He states that this treatment is very efficacious, and supersedes in the majority of instances the necessity of surgical interference. (44. 46.)

Female Genital Organs.—Pustules, pressure and pain in the groin with cold creepings, previous to the appearance of the menses. (32.) Watery and sanious leucorrhœal discharge, with heat, burning, and itching in the region. (10.)

Clinical Remarks.—At the third potency this remedy is useful in thin leucorrhœal discharges with itching and burning in the vagina, occurring in delicate females who have convalesced tardily after confinements in consequence of feeble recuperative powers. The same attenuation is appropriate against annoying pustular eruptions around the labia. (10.)

In tedious labors attending upon an undilated condition of the os uteri, Tartar-emetic will often be found of the most signal benefit in relaxing the parts. Dr. Tyler Smith also bears witness to its efficacy. (44. 46.)

The above application is antipathic and the drug must be given in nauseating, and therefore injurious doses, to produce the desired effect. Much more efficient and harmless remedies in such cases are Belladonna, Opium, Stramonium and Aconite, which are homœopathic to this rigid and undilated condition of the os uteri. (10.)

Back.—Burning in the back. Rheumatic pain in the back. Painful sensation in the back, as if from weariness. (32.) Weary pain in the back, lasting many days, especially after having eaten, or on being seated. Burning pain in the middle of the vertebral column as if caused by the application of a mustard plaster. Severe pain in the left shoulder-blade on turning the neck, and on touching it. This pain comes on suddenly during the night and is persistent. Twenty-four hours later the same pain occurs in the right shoulder-blade. (31.) Pain in the sacro-lumbar region as if he had borne a heavy weight, in the morning before rising from bed, and disappearing on rising. So much weakness of the cervical muscles that she cannot hold her head erect. (1.)

Upper Extremities.—Pain in the shoulder, as if sprained; cracking in the shoulder-joints. Rheumatic pains. Trembling of the hands. Cold hands; icy coldness of the fingers. (32.) Frequent jerkings of the muscles of the arms and hands. On the forearms, particularly near the carpal articulations, an eruption of pimples resembling itch. This eruption itches and disappears temporarily on scratching it. (1.) Small red spots like flea-bites, but insensible upon the hands, (fourth

day); which disappear at the end of two hours. The ends of the fingers feel as if dead—dry, hard, and without feeling for many days. Several dark colored spots upon the fingers (fourth day) lasting two days. (64.)

Clinical Remarks.—In one case of obstinate porrigo affecting both hands, and accompanied by intense burning and itching, with acrid exudation on scratching or rubbing the parts, we prescribed Tartar-emetic ointment externally until its characteristic eruption should be produced. Its appearance was accompanied with much pain, although more tolerable than the porrigo irritation. In about the usual period this antimonial eruption passed off, carrying with it all symptoms of porrigo, and leaving the hands cured. This is rough homœopathy, but nevertheless strictly in accordance with the law, and very efficient. Those who have had much experience with either porrigo or eczema, by any other mode of treatment, will not despise this crude application of *similia similibus curantur*.

Internally it is appropriate for itching pustular eruptions upon the arms and hands. In such cases it sometimes proves promptly curative, after Sulphur, Hepar, &c., have failed. We employ from the sixth to the twelfth attenuation. (10.)

Lower Extremities.—Heaviness in the loins. Rheumatic pain in the region of the knee. Cold feet. (32.) Very painful cramps in the legs, returning every minute. Cramps in the calves of the legs, in the afternoon, which disappear on walking. (31.) The thighs spasmodically retracted towards the bowels. (1.) Weakness of the legs. Coldness of the extremities. (27.)

Clinical Remarks.—During the progress of severe and protracted watery diarrhœas, patients often become so much reduced that the extremities become cold and powerless, and frequent cramps attack the calves of the legs. The third attenuation of this medicine is perfectly homœopathic to this condition. (10.)

General Symptoms.—Spasmodic movements and twitchings of the arms and hands. Violent clonic spasms with loss of consciousness; lock-jaw. Paralysis. Relaxation of the muscles and great prostration, languor, exhaustion, collapse, loss of speech, and coldness of the body. Cholera morbus. (32.) Contraction of the pupils. Strong violent convulsions and spasms; tetanus. Extreme restlessness and anxiety. Cold, pulseless, speechless. Thirst and burning sensation through the primæ viæ. (12.) Prostration of the forces. Insensibility. Faintness. Frequent attacks of faintness. Prolonged trembling of the head and hands, at every movement, like paralytic trembling. (58.) Symptoms often worse on being seated, or manifest themselves in this position. (64.)

A P I O L.

PARSLEY-OIL.

A U T H O R I T I E S.

Am. Journal Med. Sci., vol. 31, p. 470. (17.) Wood and Bache, (7.) King's Dispens. (100.) Braithwaite's Retrospect. (14.) Watson of Utica, (54.) Peters, (11.)

E M P I R I C A L O P I N I O N S.

It is said to be diuretic, antiperiodic, tonic, aperient and emmenagogue. (100.) Very useful in dropsy, especially that following scarlatina and other exanthematous diseases. Also used in retention of urine, strangury and gonorrhœa. (100.)

M. M. Joret and Homolle have recently employed it in intermittent fever. Of forty-three cases, thirty-seven were cured, and had no relapse, and in six, although the fever was not removed, yet it was modified in intensity. Of these forty-three cases, twenty-one were quotidians, eighteen tertians, and four quartans; five quotidians and one quartan resisted the remedy—all the others were cured. The writers consider that a proportion of cases thus amounting to eighty-six per-cent., suffices to prove the value of Parsley-oil in indigenous intermittents.

As respects the intermittents of hot countries, they group together the observations accumulated by a commission of the Society of Pharmacy to test the substitutes for Quinine at Rome, Perpignan and Ajaccio, with those of Dr. Arnic at Martinique. Of thirty cases thus treated sixteen were cured. Nineteen of these were quotidian, of which twelve were cured—ten were tertians, of which four were cured; and one was quartan, which was not cured. M. M. Joret and Homolle think it may prove serviceable in intermittent neuralgia, and the night-sweats of phthisis. (17.)

It is said to be an exceedingly offensive remedy. (11.)

A P I S - M E L L I F I C A.

P O I S O N O F T H E H O N E Y - B E E.

A U T H O R I T I E S.

N. Am. Homœopathic Journal. (67.) Marcy. (10.) Humphrey, in Metcalf's Provings. (51.) Bayard. (53.) Dunglison's New Remedies. (16.) Fullgraff. (26.) British Journal of Homœopathy. (12.)

Peters. (11.) Watson of Utica. (54.) Snelling. (42.) King's Dispensatory. (100.) Phil. Journal of Homœopathy.—Peters, on Diseases of Married Females.

GENERAL REMARKS.

In 1847, the attention of the writer was first directed to *Apis-mellifica* as a remedial agent by the following unique cure.

A lad, aged about twelve years, had been afflicted for several months with ascites and hydrothorax. He had been treated for some three months by allopathic physicians first for dysentery, followed by ascites, and afterwards for several months by a homœopathic physician. No permanent benefit resulted from either mode of medication, and the symptoms finally became so urgent that I was called in consultation, and tapping was at once resorted to in order to save the patient from imminent danger. Appropriate homœopathic remedies were again prescribed, but without arresting the onward course of the malady. The patient commenced to fill up again with great rapidity. The secretion of urine was nearly suspended, the skin was dry and hot, pulse rapid and weak, respiration short and difficult, great tenderness of the abdomen, dryness of the mouth and throat, thirst, excessive restlessness and anxiety, short, irritating cough, and an almost entire inability to sleep.

At this stage of the case a strolling Indian woman—one of the few survivors of the Narragansett tribe, suggested to the family the use of a honey-bee every night and morning. She enclosed the bees in a covered tin pail, and placed them in a heated oven until they were killed, and then after powdering them, administered one in syrup every night and morning. After the lapse of about twenty-four hours the skin became less hot and softer, the respiration less difficult and more free, the pulse slower and more developed, and there was a decided increase in the quantity of urine. From this time the symptoms continued steadily to improve, the dropsical effusion diminished day by day, until at the expiration of a few weeks, the patient was entirely cured.

This is the first cure of dropsy by *Apis* which was ever reported. (See Marcy's Practice, page 548.) From this empirical fact—this *usu in morbus*, I perceived that the profession was as yet unacquainted with a powerful remedial agent, and accordingly commenced a series of provings and of clinical trials with it, which have been continued as occasions offered up to the present time. The results of these observations, as well as those of subsequent provers, will be noted under the proper heads as we progress. (10.)

GENERAL SYMPTOMS.

Sudden prostration of the vital force, severe vomiting, profuse diarrhœa, cold extremities, paleness of the face, severe griping pains in the abdomen, pulse feeble, scarcely discernible at the wrist; no redness or pain in the part stung. (From a sting on the eyebrow.) Bruised sensation all over him, sides, hips, back, everywhere, restlessness the whole night, and loose urgent stool. (51.) Stinging, prickling, burning, swarting and itching of the skin. Morbid excitement of the urinary organs, œdematus swellings, irritation of the mucous membrane and the digestive apparatus, with hot and burning sensations; general sensations of heat, fullness and oppression. (10.)

EMPIRICAL OPINIONS.

In doses of 5, 10 or 15 drops, three or four times a day, this is highly recommended in many diseases of the bladder and kidneys, as well as in some uterine affections. Some practitioners assert that it will produce abortion in the pregnant female, if its use be too long continued, or when employed too freely. (100.)

It seems to have been most successful in quinsy, ascites, particularly, (post-scarlatinal) amenorrhœa, dysmenorrhœa, hypertrophy of uterus, with induration, &c. Some forms of ophthalmia and also hordeola or styas, erysipelas, &c., have been cured. See the report above alluded to. For Hydrops amnii et Œdema labii, see Peters' Diseases of Married Females. (Watson of Utica.)

EFFECTS ON THE NERVOUS SYSTEM.

Nerves of Motion.—We infer that it operates as a gentle stimulant and tonic upon the anterior portion of the spinal column. An increase of muscular power, and a tendency to spasmodic movements of various muscles have now and then been observed from a protracted use of large doses. (10.)

Nerves of Sensation.—It rouses the nerves of sensation into a condition of morbid excitability. A marked effect produced upon several provers was excessive sensitiveness of all parts of the body to the touch, the heat and cold; and their sensitiveness was usually accompanied by great mental irritabilities. (10.)

Ganglionic Nerves.—Many facts prove, that it acts specifically upon this system of nerves. Its influence in producing muscular contractions of the uterus, miscarriages, menorrhagia, &c., is probably due to a primary action upon the great sympathetic. Other reflex phenomena have occasionally been noticed, which lead us to the same conclusion. (10.)

ON THE TISSUES.

Mucous Tissues.—Upon the mucous membrane of the tongue, mouth, fauces and throat it acts specifically. Redness, burning, sensation of

fullness and dryness are the chief effects. Two provers experienced coryza, with feeling of swelling and burning of the schneiderian membrane. It acts especially upon the neck of the bladder, producing mucous and bloody micturition. Its influence upon the pulmonary mucous membrane is evidenced by oppression of the chest, frequent inclination to expectorate and burning of the membrane. (10.)

Serous Tissues.—Its action upon the serous tissues is strongly marked. Among the first effects which we experienced while proving it, was great tenderness of the entire peritoneum on pressure, or on turning in bed. It impresses specifically all the serous membranes, producing that kind of inflammation which disposes to dropsical effusions. The physiological and clinical facts which we have adduced farther on demonstrate this conclusively. (10.)

Muscular Tissue.—Temporarily it exalts muscular power; but a reaction occurs in a few hours, which leaves the muscles wearied, weak and tremulous. The muscles are apt to become stiff, tender upon pressure, and somewhat swollen. (10.)

GLANDULAR SYSTEM.

Ovaries.—Upon these organs it exerts a most powerful influence. Not only does it produce inflammation and enlargement of the ovaries themselves, but it operates specifically upon their serous envelops.

Tonsils.—It acts slightly upon the tonsils and the salivary glands; but this slight action may be due to the effect produced upon the mucous membrane, covering these glands. (10.)

The action of *Apis* is very similar to that of *Cantharides*, *Euphorbium*, *Mezereum* and *Rhus*, and often succeeds when these remedies fail. It is often wonderfully useful in erysipelatous, serous and œdematous inflammations and in serous effusions and dropsies; still we have often seen it fail in our own and others' hands, when it seemed fully indicated. (11.)

VASCULAR SYSTEM.

FEVER AND INFLAMMATION.—Pulse accelerated. Sweat breaks out occasionally. Occasional feeling of chilliness. Heat at night with agitation. Shivering on the slightest movement when sitting in the evening, with headache, hot face and hands. Rigor, with eruption of nettle rash, after heat. (51). Slight rigors, followed by flushes of heat over the entire body, with headache, weariness in the back and legs and nervous excitement. Eruption like urticaria, accompanied with much heat of skin, and slight febrile symptoms. Pungent heat of the body, while the feet and hands are cold. (10.)

Clinical Remarks.—It is appropriate in *scarlatina*, when there are much heat, redness and irritation of the skin, great restlessness and nervous agitation, sensitiveness of the entire surface of the body, an œdematous and erysipelatous appearance around the ulcers in the throat, frequent and painful urination, redness, heat and burning of

the tongue, disturbed sleep and thirst. In many instances where the above group of symptoms have been prominent, the third dilution of Apis has afforded speed relief.

Its virtues in scarlatinal dropsy are well known. Operating, as it does, specifically upon the kidneys in the main seat of the malady, and also upon the membranes, which throw out the effusion, it is evident, that it must present an excellent simile to a majority of these cases. (10.)

Post-scarlatinal dropsy, in a girl about nine years old, developing itself a month subsequent to an attack of scarlatina, was treated successfully by Dr. E. A. Munger with Apis; the patient was in the following condition: puffed face, remarkably so about the eyes, anxious expression of countenance, abdomen very much distended, and general anasarca condition of the body, violent beating of the heart, distinct over the whole chest; pulse 160 or more; respiration *excessively* labored, panting and hurried; inability to assume a recumbent posture; urine very scanty and high colored; heat and dryness of the surface, with thirst; no pain. Aconite, Ars., Bell., Digit., Helleb., with no apparent change for the better, on the contrary, on the 2d day of January, being the third or fourth day of her present illness, the condition became still more alarming; face and lips livid; gasping respiration and exceedingly rapid; pulse indistinct; cold perspiration and cold face and extremities. The case was considered as extremely doubtful of recovery; however, after the use of Apis 3, for about 24 hours, when the patient began to pass large quantities of urine, from that time gradually recovering, when on the tenth day of treatment she was considered perfectly cured. (67, 26.)

Dermoid Tissue and Skin.—Prickling all over the body, most on the back and palms of the hands, the face, forehead and under the eyes, mostly in circumscribed points, immediately on taking the drug. Eruption resembling nettle-rash came out all over the body of a man, soon after being stung. Blotches on the body and back of the hands, attended with stinging like nettles. Portions of the surface as large as a dollar well up without discoloration, and become excessively sore and tender to the touch, 1st attenuated tincture. Itching prickling in the skin on different parts of the body. Sensation of burning heat and stinging in various portions of the surface of the body. Furuncles, and large swellings, with stinging pain. Nettle rash. Oedematous swelling of the extremities. (51.) Flushes of heat over the whole surface of the body. Itching and burning eruption upon the back, arms, and legs. Red blotches upon the chest and extremities, which itch violently on exposure to the air, or by scratching them. Itching eruption like urticaria, with slight febrile symptoms. Prickling and smarting sensation in the hands and arms, afterwards affecting the entire body slightly. Very troublesome burning, stinging and itching in various parts of the body, shifting here and there, and rendering it difficult to locate it. (10.)

Clinical Remarks.—A gentleman aged thirty, while travelling in the West, caught what he termed the prairie itch. On his return to New-York he consulted me for the following symptoms: an eruption of a vesicular nature between the fingers, with intense itching, and on being scratched inclined to ulcerate. The rest of the body was covered with a dry, red, raised eruption, attended with uncomfortable itching. Lycopod. 30th, and Sulph. 30th was given to him. In a few days he returned, complaining that he had no rest at night from a “*stinging burning*” in the eruption, which almost set him distracted from the irritation. Three globules of Apis 30th in a little sac-lac. was given to him in the evening, the dose to be repeated every third hour until he had taken it three times. He informed me the next day that in half an hour after taking the first powder he was relieved from the *burning* and *stinging* sensation. The medicine was permitted to act ten days, after which there was a slight return of the symptoms. He then received a few globules of the 200th attenuation of Apis, under which the sensations again passed away, and the disease gradually disappeared. (53.)

Another case of eruption was cured by Dr. Bishop with the following characteristics: commencing with small pustular formations just under the cuticle, with burning, smarting, stinging sensation; in coming to maturity, deposition of dry, scabby matter, laminated form, scaly, brownish and sometimes straw-colored.

Looseness of the bowels in the morning, thin, watery, yellowish; some griping at times, but generally painless. The looseness of the bowels had continued three or four weeks. Treatment for last ten days, Rhus and other anti-psoric remedies; no abatement of symptoms either of skin or bowels. The parts mostly affected with the eruption were inner portion of the thighs, also below the knees, upon the hands, face and back of the neck, and upon the central portions of the body. He received Apis 1st, to be taken twice in twenty-four hours, which was followed by an effectual and almost immediate cure of both diarrhoea and eruption; no return for eighteen months. (26. 51.)

The cutaneous affections for which Apis are most appropriate are urticaria, lichen, porrigo, eczema, prurigo, and certain forms of scarlatina. The special indications are, itching, stinging, pricking, and burning of the eruptions. When the eruption presents this peculiarity and other symptoms correspond, one of the high dilutions will generally afford prompt relief. (10.)

In Urticaria.—Dr. E. A. Munger has used Apis Mellifica with success in several cases of urticaria, of which the following are the most prominent symptoms: hard, red, somewhat conical swellings, occurring usually on the lower extremities below the knees, but sometimes on the arms, and occasionally, but rarely, on other parts of the body, varying in number and size, some being no larger than a half dime, others an inch or two in diameter. Heat, redness, *extreme soreness*, and a burning, smarting, stinging pain are the principal characteristic symptoms.

In from two to six days the spots which first made their appearance become livid, and the swelling, heat and pain subside, but unless the disease is checked, new ones continue to appear for an indefinite time. There is usually but slight general swellings of the limbs affected, and but little febrile excitement or other constitutional symptoms, but in a few instances they have been considerable. (67. 26.)

Mind and Disposition.—Irritable disposition the eighth day; nothing appeared to satisfy him, all out of place. Unfitness for mental exertion. Dread of death, or sensation as if he should not be able to breathe again. (51.) Great anxiety and apprehension of some approaching disaster. Intellect clear and active, but morose and irritable. (10.)

Sensorium.—Confused vertigo for several days, at times very violent; worse when sitting than when walking, and extreme when lying down and on closing the eyes, from several doses of the 30th. Head is dull and slightly confused. Crazy, wild, blind staggers in horses, (old observation.) (51.) Vertigo on rising suddenly from bed. Lightness of the head on rising, and when walking in the open air. (10.)

Head.—Chronic headache in nervous subjects, violent pain in the forehead and temples, at times involving the eyes, attended by vertigo, nausea, and vomiting; must hold the head and eyes down. Pain in the sinciput and confusion of the head. Violent headache, mostly confined to the forehead, with fever, second day. Burning and throbbing in the head, aggravated by motion or stooping, temporarily relieved by pressing the head firmly with the hands, with occasional sweat for some hours. Violent pressive pains in the forehead and temples for several days. Violent sharp pain in the left temple. Headache with fullness and heaviness in the occiput. (51. 26.) Sense of fullness and heaviness of the head. Head feels as if swollen. Severe pains in the eye-balls, increased by exposure to light. Puffiness of the scalp, forehead, and around the eyes. Integuments of the head feel swollen and stiff. (10.)

Clinical Remarks.—Dr. Bishop's case of *cephalalgia*, in a man aged thirty-six, subject to periodical headache, was always promptly relieved by *Apis*. (26.)

Hydrocephalus incipient successfully treated by Dr. Bishop, with *Apis Mellifica*, in a child eight years old, of psoric taint. Dull, stupid state during the day, much inclined to sleep; talking during sleep at night, difficult to be aroused in the morning. Great languor and lassitude, pale face, slight constipation, urine small in quantity—has been ill about two weeks. She received *Apis* 2d, and recovered completely by its use. The mother says: eight years ago she had a daughter who was attacked similarly, and who at length died of *hydrocephalus*. (26.)

With the third dilution we have often cured congestive headaches, accompanied by œdematous swellings about the eyes, and of the fore-

head. It is homœopathic to albuminaria arising from pregnancy, when the following symptoms are present ; frequent headaches, fullness and pressure in the head, puffiness of the forehead and eyes, determination of blood to the head and face, œdema of the legs, albumen in the urine. A persistent use of the second or third dilution of Apis will remove these annoying symptoms, and thus prevent what would otherwise occur sooner or later during the progress of gestation—puerperal convulsions. We can recall only two instances of this kind of albuminaria, where we have deemed it necessary to employ the corrosive or protiodide of Mercury. (10.)

Sleep.—Night sleep is full of dreams, (this symptom repeated in every proving). Fidgety restlessness the latter part of the night. (26.) Fidgety restlessness the entire night, with inability to sleep. (51. 26.) Great inclination to sleep, but inability to do so, from extreme restlessness and nervousness. Sleep disturbed by oppressed respiration, and disagreeable dreams. Sudden startings from sleep with great agitation and anxiety. The prover wakes from sleep in the morning, weary and unrefreshed. (10.)

Clinical Remarks.—One of the most troublesome symptoms of hydrothorax consists in an almost entire inability to get sound and refreshing sleep, in consequence of accumulation of water in the thoracic cavity. Under these circumstances Apis is one of our most valuable resources, since it bears homœopathic relations to both cause and effect—to the morbid condition of the thorax, as well as of the brain. It is no less useful in the disturbed sleep which obtains in certain stages of arachnitis ; as here also it reaches both cause and effect. (10.)

Eyes. Quivering and twitching of the left eye-ball, especially at night. Burning stinging in the right eye, commencing with a dull heaviness and causing flow of water ; twice repeated. Stinging itching in the eye, eyelids and around the eyes. Pain around the orbits of the eye. Slight agglutination of the eyes at night ; had to pick them open in the morning. Soreness, redness of the eyes and lids, secretion of mucus and agglutination of the lids, attended with nettlerash over the surface. Erysipelatous inflammation of the eyelids. Weak eyes ; for several days, with photophobia. Œdematous swelling of the eyelids. Smoky opacity of the cornea, occasioning almost entire loss of sight (curative) (51. 26.) Redness and smarting of the eyelids. Eyes sensitive to light. Puffy swellings of the eye-lids, and around the eyes, with sensation of burning and stiffness of the integuments. Acute pain in the eye-balls. Slight inflammation of the lachrymal sac. Redness of the conjunctiva, with burning pain, increased flow of tears, and great sensitiveness to light. (10.)

Clinical Remarks.—Two cases of Ophthalmia by Dr. Humphrey. One case in a lady, aged eighteen, fair complexion, rather lymphatic temperament ; was attacked in Oct. 1850, with a violent inflammation of the right eye. It came on suddenly without apparent

cause, was treated allopathically for five months; during the treatment three ulcers had formed on the cornea, one in December and two others in February. When called in, the ulcers, which had been nearly healed, were worse; the vessels of the eye injected, dreadful pain darting through the eyes, intolerance of light in both eyes, keeping them constantly closed, the entire cornea was scattered over with dark, smoky clouds and thickened and covered with a film. She could discern light only by being turned towards it. Pupil could not be seen through the smoky and discolored cornea, albuginea dark-red, tears of scalding water ran from the eye; cold feet; hot head, delaying menses. In Feb., she received Merc.-corr., and Belladonna, Merc. and Hep. 3, until March 20th, with only partial benefit. She now took Apis 30th in water, a spoonful morning and evening,—improvement followed immediately. Patient continued the same medicine until May 1st, when she was discharged completely cured.

CASE 2.—A woman of fifty years, dark complexion, bilious temperament, had suffered from ophthalmia for three years, and had been, with little benefit, under the care of several oculists. Her eyelids were swollen, dark-red, everted, denuded of the lashes, granulations along the edges, the conjunctiva reddened and full of dark vessels, the cornea darkened and smoky, vision very indistinct; photophobia, running at the eyes, and lids agglutinated. Apis 30th, every three or four days, changed the entire aspect of the case. The eyelids were relieved entirely, conjunctiva lost its dark vessels, the cornea became clear, vision improved, and she left almost entirely well. (51, 26.)

Yeldham reports six cases of conjunctivitis-erysipelatosa or scrofulosa, cured by Apis, 3d dilution.

We have been in the habit of prescribing it in ophthalmia, after the acute symptoms have been moderated by Aconite, Euphrasia, Belladonna, Mercurius, &c. It seldom fails to relieve the following symptoms: slight redness of the conjunctiva; smarting and burning sensation in the eye-balls and eye-lids; swelling and redness around the eyes; lacrymation; sensitiveness of the eyes to light; secretion of mucus during the night, which agglutinates the lids, and causes much pain when attempting to open them.

Several cases of ophthalmia occurring during the course of rubeola, have been promptly cured by it.

In several cases of *fistula lachrymalis*, we have employed it with temporary benefit, but we have never been able to cure this malady with it. We have generally prescribed it at the third dilution. (10.)

Dr. Frelich has used it successfully in œdema, and erysipelalous inflammation of the eye-lids.

Three cases by Mad. de Bonneville. CASE 1.—A woman about thirty-seven years of age, sanguine nervous temperament, had both her eyes closed with a purplish white swelling, preceded by intense pain in the right eye. One dose of the Apis removed the swelling,

and when it returned about a fortnight afterwards, it was again removed by one dose, and has not returned again in eleven months.

CASE 2.—A girl of thirteen years, received Apis for a dark, puffy swelling under the eyes; a dose every three days, and was cured in two weeks.

CASE 3.—A woman, about thirty years old, had swollen eyes every morning for a long time. Cured by three doses, alternated with Sulph¹. (51. 26.)

Nose.—Sneezing. (51.) Redness and burning in the nostrils. Œdematous swelling of the upper lip and nose. Erysipelatous inflammation of the nose. Acrid discharge from the nostrils. Burning itching, and stinging eruption upon the nose. (10.)

Clinical Remarks.—It has proved curative in erysipelatous blotches upon the nose, in œdematous swellings of the upper lip and nose, and in itching and stinging eruptions, like hives, upon the nose and cheeks. In nasal catarrh dependent upon chronic inflammation of the schneiderian membrane, it is a remedy of considerable value. One obstinate case of catarrh in the person of a chlorotic female, eighteen years of age, was cured in three weeks by one dose daily of the 30th dilution. The same patient had for several years been afflicted with a profuse and acrid leucorrhœal discharge, which was cured simultaneously with the catarrh. (10.)

Teeth.—Jumping pain in the superior molars of the left side. (51.) Sore pain in several teeth, accompanied by swelling and redness of the gums and cheeks. Throbbing pain in a single tooth, with numb sensation in the gums. (10.)

Clinical Remarks.—At the third dilution it has cured toothache, both dull and acute, caused by erysipelatous inflammation of the lips and gums. We have several times afforded almost immediate relief of violent pains in single teeth, by rubbing gently for a moment the gum of the affected tooth with a strong tincture of the drug. This application, however, is by no means equal to a saturated tincture of Cochineal for the same purpose, with which we have often cured instantaneously the most severe pains of single teeth, by rubbing the gum for an instant. (10.)

Face.—Sore elevations like the sting of insects, very tender to the touch, at the external corner of the eye-brow. Burning stinging as of fire, on the chin, malar bones and left superciliary ridge. Swelling of the lips and sensation of swelling for several days, followed by a fine eruption around the lips, and dryness and peeling off of the lower one. Prickling in the lips and sensation as if they had received a severe contusion, with sensation of swelling in a few hours. (51. 26.) Face puffy, with a feeling of stiffness. Face swollen, red, and painful. Lips swollen, stiff, and slightly tender. Puffy swellings (œdematous) under the eyes, with smarting and burning of the eye-lids. Itching and burning eruption upon the lips, the chin, the nose, and

nder the eye-brows. Spots like hives upon the chin and cheeks. (10.)

Clinical Remarks.—A case of Erysipelas by Dr. Greene, of the whole of one side of the face and nose; swelling under the eye resembling that produced from the sting of the honey-bee. Apis 3, ten or twelve drops in a glass of water, a spoonful repeated in one to three hours, until better. Swelling subsided entirely, and the next morning the young lady returned to her school, and has had nothing of the kind since. (51. 26.)

In seven cases of erysipelas of the face with the ordinary symptoms, Apis 3 has been given with great success, after Aconite and Bellad., by Yeldham. (12. 26.)

In the œdematous form of erysipelas, Apis is one of our best specifics; but in the vesicular variety of this malady, it is not homœopathically indicated. In making a selection of the remedy, therefore, we must make the proper distinction between the two forms of the disease, and not administer Apis where Rhus or Belladonna would be appropriate, and *vice versa*. Our talented associate, Dr. Preston, has often employed Apis in œdematous erysipelas, after Rhus and Belladonna had failed to afford relief. (10.)

It is useful in urticaria involving the face, and in itching and smarting blotches which come and go upon the face. Dr. Freligh commends it highly in œdema of the lips and upper eye-lids; in erysipelatous blotches, and hives attended with considerable swelling, biting, stinging and itching. (10.)

Mouth and Throat.—Contraction and erosion in the throat in the morning. Extreme sensation of rawness and scalding all around the margin of the tongue, as if it had been scalded, and slight pimples on the edge, from taking the tincture at four hours. Increased feeling of contraction in the throat, rendering deglutition difficult, at eight hours. Rawness, burning and blisters along the edge of the tongue, which are very painful, accompanied with stinging, at eight hours, from the tincture. Scalding of the mouth and throat for two days. Dryness and heat in the mouth and throat, and a feeling in the tongue as if burnt. Dryness of the tongue; red, fiery appearance of the buccal cavity, with painful tenderness. An aching pressure as if from a hard body, back in the upper part of the throat and fauces. (51.) Stinging, burning, dryness, and swelling in the throat. Frequent inclination to swallow, but the act is attended with some difficulty, from diminished power over the muscles of deglutition. Dryness of the tongue, with prickling sensation in the tongue and fauces. Redness, swelling, and burning pain of the entire tongue. Erysipelatous appearance of the tonsils and fauces. (10.)

Clinical Remarks.—Two cases of *tonsillitis*, by Dr. F. Humphrey. One case in a lady, aged twenty-six years, subject to frequent attacks of quinsy, which, despite the application of the usual remedies, generally ended in suppuration, was taken with one of the old attacks.

She received first Aconite, then Apis 30th, which soon afforded relief, and under its use in twenty-four hours, every vestige of the complaint disappeared. She declares never before having received such marked and substantial relief from any other medicine.

CASE 2.—Similar to the one just cited, was cured by Apis in about forty-eight hours. (51. 26.)

A case of *glossitis*, by Mad. de Bonnaville, in a woman aged thirty. Sanguine, nervous temperament. Swelling of the tongue, with a dry, glossy, yellowish appearance, accompanied with excessively painful vomiting of bile, &c. Received Nux and Bryonia until the vomiting was subdued. The swelling of the tongue continuing, gave Apis twice, once in three hours, with a decidedly good effect. A few months afterwards, the same remedy was given with equally good results. (51. 26.)

Apis-Mellifica in nine cases of angina faucium and tonsillarum, is said by Yeldham (Brit. Journal of Homœop.) to have worked wonders. The prominent symptoms were redness and inflammation of the throat, enlargement of the tonsils and velum palati, difficulty of swallowing, and much secretion of saliva, accompanied with fever, headache, and pains in the limbs. In some cases it was administered in alternation with Aconite. (26.)

It has proved eminently successful in tonsillitis, after the acute symptoms have been subdued by Aconite, Belladonna, and Mercurius. In such instances it appears to rouse into renewed activity the enfeebled structures, and speedily restores them to a normal condition. In erysipelatous inflammations of the fauces, it is often indicated after Belladonna and Rhus. Chronic catarrh of the throat, attended with dryness, burning and stinging pains, and morning and evening secretion of tenacious mucus from the throat, have often been materially benefitted, and sometimes cured, by rarely repeated doses of the 30th dilution. (10.)

Appetite and Stomach.—Violent eructations. Nausea, apparently from the throat. Nausea and inclination to vomit at night, and disagreeable rumbling in the abdomen as if diarrhœa would come on. Prickling pain and sensation of heat and burning in the stomach. (51.) Increase of appetite. Strong craving for food and drinks, but nausea, eructations, heat and burning in the stomach shortly after eating or drinking. Distention of the stomach, with occasional burning sensations at the pit of the stomach and in the throat, lasting several days, and followed with catarrh of the stomach, with its usual dyspeptic concomitants. Bitter, or acrid eructations. (10.)

Clinical Remarks.—It is homœopathic to chronic gastritis, characterized by frequent attacks of nausea, occasional vomiting, sensitiveness and burning of the stomach, worse on pressure; acrid or bitter eructations; distress in the stomach after eating or drinking, and imperfect digestion. In catarrh of the stomach, when the excessive secretion of mucus prevents the gastric juice from properly coming

in contact with and acting upon the food, it is a remedy of great value. Under its use we have often had the satisfaction of observing this secretion diminish, the dyspeptic symptoms to subside, and the digestion to become normal. When the tone of the stomach has become impaired from long-continued hepatic derangements, we know of no remedy more frequently applicable than this. (10.)

Abdomen.—Abdomen full, swollen and tender, with swollen feet and scanty secretion of urine. Burning, internal soreness, external tenderness, even to the pressure of the bed-clothes. Aching and pressing pain in the hypogastrium, with bearing down in the uterus, as if the menses would come on, in two persons. Rumbling in the abdomen, as if diarrhœa would ensue. Sore, sickly feeling in the abdomen. Dull pain in the bowels. Fullness and evident enlargement of the abdomen, from many and large doses, in a female. Fullness and sensation of bloating in the abdomen. (51.) Tenderness of the entire abdomen on pressure, or on turning in bed. Sensation of fullness in the abdomen, with dull pains, which are worse on motion, or from pressure. Tension over the hypochondriac region, with prickling sensations. (10.)

Clinical Remarks.—**CASE 1.**—*Ascites* in a man seventy years old; feeble constitution, lymphatic temperament, light skin, blue eyes; was seized, after an attack of influenza, with dropsical swelling of the chest, abdomen, feet and legs. He was unable to lie down without panting, and was always worse towards morning; urine reduced to half a pint per day. He received Apis 3; after three days, the urine began to flow freely; between three and nine A.M., two quarts would frequently be discharged, and under the use of this remedy, subsequently alternated with Arsenic 60, he entirely recovered, as reported by Dr. Barker.

CASE 2.—*Ascites* reported by Dr. Greene, in a child three and a half years old. Abdomen very much distended with serum, countenance sunken, pale, sickly, pulse quick, rather wiry, appetite poor, urine scanty and high-colored; he had recovered from an attack of enteritis not long since. Ars., Digit., Dulc., Merc., China and Sulph. did not appear to arrest the disease; paracentesis was performed, and seven or eight lbs. of serum drawn off. Apis, one drop three times a day, was given for five or six days, with two doses of Merc.-sol.; urine became more abundant, but there was again some fluctuation perceptible. Apis 3 was continued for five or six days longer, his health improving; medicine repeated less frequently, and patient has all the appearance of a speedy recovery.

CASE 3, by Dr. F. Humphreys.—A case of ascites in an elderly lady of light complexion, lymphatic temperament; had long suffered from dropsical swelling of the abdomen and extremities. The ankles and feet quite œdematous and clumsy, urine scanty and high-colored, also suffering from general depression and weariness. Apis 30 rendered prompt and decided service, and has since always relieved her,

when from extra fatigue or other cause, the dropsy has manifested itself. (51.)

The first reported case of ascites cured by Apis, is that of the lad alluded to at the commencement of this article, under General Remarks. This was an empirical cure, but one of so prompt and decided a character, as to arrest the attention of the writer and induce him to institute a course of physiological and clinical researches with the drug. From that period to the present time we have continued these investigations, and, for the most part, with satisfactory results. We have employed it in very many and in a great variety of cases of ascites, some of which we have cured, others palliated, and in a few instances have witnessed no effects. The result of our experience is, that it is specific in those cases which have been caused by excessive loss of blood, by weakening diarrhœas, functional derangements of the liver and spleen, chlorosis, scarlet fever, and abuse of drugs, like Arsenic, Quinine, &c., allopathically administered. Ascites dependent on organic affections of the heart, or liver, may sometimes be palliated by it, but it is by no means our best remedy in cases of this description. Although it is powerfully diuretic, and if pushed in large doses will produce strangury, yet its curative virtues in dropsical affections are chiefly due to its specific action upon the serous membranes. (10.)

Dr. Barrows, of Providence, R.I., has generally found it quite successful in ascites, accompanied with anasarca. Among other cases, he reports that of a middle-aged lady, who had some chronic hepatic affection, and who had sudden attacks of ascites, which he has promptly relieved with Apis, and with no other remedy. In these attacks there is great swelling of the abdomen, with very little anasarca, and no pain except that caused by the distention and consequent dyspnœa. He had used Arsenicum, Cannabis, Apocynum, and other remedies without effect, when the first dose of Apis was attended with marked relief, and in a few hours with a decided diminution of the dropsical swelling, and gradually with an entire cure. "On several occasions," remarks Dr. Barrows, "this lady has had other medical attendance, and been sick a long time before recovery; and once after having used quite a number of remedies prescribed by a distinguished homœopathic physician, without benefit, she was entirely relieved by the Apis alone in twenty-four hours, although her physicians had pronounced tapping indispensable to save life." (10.)

Dr. Madden commends Apis highly in dropsical affections, even when dependent upon incurable organic maladies. "That it will aid the absorption of effused serum and prevent its exudation when threatened, I have abundant evidence to demonstrate; nay, its effects are at times produced even when the effusion is consequent upon incurable organic disease."* He cites a case of ascites and œdema of the lower

* Brit. Jour. of Hom., July, 1853, p. 417.

extremities, in a scrofulous lad affected with mesenteric disease and phthisis, where the effused fluid was almost totally absorbed in three weeks, inducing the lad and his friends to suppose that he was recovering, whereas the original disease proceeded unchecked, and he died five months afterwards of fully developed *phthisis*, without, however, any considerable return of dropsical effusion. Dr. Madden alludes to several other cases of a similar character, to illustrate the value of the remedy as a disperser of serous effusions caused by organic uterine, spinal, heart, liver, and lung-diseases.

As a palliative in such cases, it may be useful; but we question whether it possesses any special advantages over *Apocynum*, *Juniper*, and this class of diuretics.

In all curable cases of ascites, however, it is one of our most specific and reliable remedies; not in virtue of its diuretic properties, but from its general homœopathicity to most cases of this kind. A glance at the physiological effects noted above, (and we have personally and repeatedly observed most of these phenomena,) will demonstrate this assertion. We are sustained in this opinion by Dr. Madden, who observes: "when, however, the effusion of serum is the result of an inflammatory process which itself constitutes this disease, the remedy then acts favorably, not only upon the effusion, but removes the inflammatory action at the same time, and thus effects a complete cure."*

Nor is this favorable action of the drug confined to abdominal dropsies, for effusions within the chest and cranium, caused and accompanied by pleuritis, pericarditis, and arachnitis, have been often removed, together with the inflammations which have caused them. The experience of several physicians has afforded instances of this kind. Dr. Madden reports two cases "where there was marked evidence of *arachnitis*, and where not only the threatened or actually effused serum was re-absorbed, but the meningitic condition was entirely removed." In another case, "hydrothorax had previously existed, according to the assertion of an allopathic practitioner, and there existed considerable oppression of the breathing, so that probably some part of the fluid continued unabsorbed, and here *Apis* acted extremely well."†

In all of his cases Dr. Madden employed the 3d decimal dilution. We have tested both triturations and tinctures, in high and low dilutions, and have witnessed good results from both forms of the drug, and from strong and weak doses. But in dropsical affections, we prefer the low attenuations. (10.)

A case of gastro-enteritis, is reported by Dr. Bishop, in a child eight years old, ushered in by vomiting, extreme pain and tenderness in the region of the stomach and upper portion of the abdomen, fetid breath, foul tongue, constipation, disturbed sleep at night, muttering,

* Brit. Jour. of Hom., July, 1853, p. 417. † Ibid, p. 418.

&c., pulse frequent and wiry. After one week's unsuccessful treatment, he received Apis 3, three doses; next day found him better, rested quite well during the night, tenderness and pain much less; and from this time the prominent and troublesome symptoms abated, passing off entirely in a week. (51.)

After the acute symptoms of enteritis have been subdued, and the disease in a subacute form persists, threatening to superinduce dropsical effusions, a few doses of Apis usually affords prompt relief. The following are a few of its characteristic symptoms: Sore pain in the bowels; tenderness of the abdomen on pressure; sense of fullness and tightness of the bowels; tendency to diarrhœa; flatulency; unusual heat and redness of the tongue and mouth; excessive mucous secretion in the bowels. (10.)

Anus and Stool.—Throbbing in the rectum. Loose, lumpy stool. Loose, urgent stool in the morning. Stools soft and pappy, mixed with serum. Loose stools eight days in succession. Several loose yellow stools, with extreme weakness and prostration; stools coming on at every movement of the body, as though the anus were continually open: in a lady of forty, affected with chronic ascites. Yellow, watery diarrhœa; griping; twelve movements in as many hours; frequent yellow watery evacuations, from a single dose. (51.) Watery diarrhœa, with smarting at the anus. Frequent disposition to go to stool, with inability to accomplish anything. Distention and soreness of the bowels, with much flatulency and small brown alvine discharges, affording no relief. Small bilious discharges, which produce slight smarting at the anus, and tenesmus. Loose discharges, containing some mucus and considerable blood. (10.)

Clinical Remarks.—**CASE 1.**—A child of nervous temperament, fifteen months old, had a whitish, red swelling at the lower portion of the anus, attended with intolerable itching. Two doses of the Apis, at an interval of six days, entirely removed the affection.

Three cases of diarrhœa, are reported by Dr. Bishop.

CASE 2.—Yellowish, greenish diarrhœa; some griping pain; pain in the eye-balls and across the forehead, more on the right side for some years past, but formerly in both temples alike; languid, listless, unaccountable feeling. A year ago had partial development of intermittent fever. Inability to concentrate his thoughts. Hands bluish, inclined to coldness; appetite poor. Was promptly cured of all his symptoms, by a single dose of Apis 3.

CASE 3.—J. S., aged six years. Chronic diarrhœa and general emaciation. Sequelæ of measles. In this case there had been only a partial development of measles upon the surface, attended with fever and cough for two months, and then great emaciation, with tenderness of the bowels, loss of appetite, until he became a mere skeleton. A few drops of Apis improved his appetite, bowels became regular, his flesh returned, and he continued quite well for some months. Subsequently he received for the following symptoms: dry, white tongue, loss of

appetite, feverish during the night, and at other times pale, emaciation—a few doses of Apis which promptly relieved him. (26.)

CASE 4.—Mrs. C—, aged forty; gastralgia and bilious diarrhœa. Pain and tenderness at the pit of the stomach, with burning sensation, as in some cases of acidity; fœcal discharges, yellowish green color, nearly painless. This lady had occasionally been subject to long and severe affections of the stomach, sometimes connected with obstinate constipation, at other times diarrhœa. She attributed it to erysipelas, which at times made its appearance upon the lower limbs and upon various portions of the body, in the form of dark purplish and painful tumefactions, attended with much constitutional disturbance. I have been treating her for what she called “erysipelas in her stomach.” She received three doses of Apis 3, with directions to repeat once in twelve hours, if no aggravation of symptoms occurred, but if so, to omit the medicine. The first dose increased the burning sensation in the stomach, also the diarrhœa. This aggravation subsided in eight or ten hours, with great improvement in all the symptoms. The same occurred after having taken the second dose, but was followed by a perfect cure. Her erysipelatous affection has never made its appearance since. (51.)

Apis has effected excellent results in diarrhœas accompanying abdominal typhus, where there is great abdominal tenderness on pressure, much rumbling of wind in the bowels, brownish, watery, or bloody discharges; suppression of urine, or large secretion of pale or straw-colored urine, and sensation of burning at the anus after each evacuation.

It is appropriate in bilious diarrhœas, with soreness and burning pains in the abdomen, sense of fullness in the bowels, lassitude, indisposition to mental or physical exertion, sallow countenance, restless nights, thirst, red urine, and bitter taste.

With the third dilution we have cured one case of obstinate chronic dysentery, characterized by frequent discharges of gelatinous mucus, slight tenesmus, great emaciation and debility, flatulency, and general soreness of the abdomen. (10.)

Urine and Genitals.—Repeated urination every few minutes, continuing through the entire day, in a person never subject to such attacks. Frequent and excessively profuse discharge of natural urine through the day and night, in a dropsical and pregnant subject, from three doses of the 30th. Frequent and copious discharge of urine. Burning in the urethra before and after micturition. A pustule, sore as a boil, surrounded by a red areola, and matured in the centre, arises in the hair of the pubes, remaining sore and painful some days. Frequent desire to urinate, attended with burning in the urethra, with uneasiness in the spermatic cord; on sixth day, from large doses. (51.) Frequent urging to urinate, with copious discharges of straw-colored urine, (from large doses.) Vesical tenesmus, with frequent slight discharges of red urine. Burning and scalding in the urethra, especially

near the neck of the bladder, during and after urination. Strangury. Frequent and painful urging to urinate, with scanty discharges of urine mixed with blood. Copious urinary secretion, (primary effect,) succeeded by very rare and small discharges, (secondary effect.) After urinating, pain in the neck of the bladder, with shooting pains along the ureters towards the kidneys. (10.)

Clinical Remarks.—Dr. Humphreys reports a case of inflammation of the labia, in a lady thirty-eight years of age, mother of several children, who had an extremely large and painful swelling of the labia, attended with violent heat and stinging pains. She received *Apis* 30th, a dose every three hours in the afternoon, and before the next morning the swelling and pain had disappeared, and she was rapidly restored. (51.)

In inflammations of the neck of the bladder, with frequent desire to pass water, great pain and vesical tenesmus during and after the act, urine red, hot and scanty, sometimes bloody, discharge of mucus after urination, sympathetic pains down the spermatic cords, and up through the ureters to the kidneys, we have found the twelfth dilution of *Apis* a remedy of great value. We can likewise highly commend it at the same dilution, in obstinate cases of "irritable bladder," where the patient is obliged to urinate almost every half hour, both day and night. As a remedy in this class of maladies it rivals, and in many instances is superior to *Cantharides*. But it should never be prescribed lower than the sixth dilution, if we desire the best effects of the medicine.

When the urinary secretion is very small, as in most cases of dropsy, and the other principal symptoms correspond with those of *Apis*, the entire group will in most instances readily yield to the remedy.

Against retention of the urine from inflammation of the bladder and strangury, whether caused by mechanical injury, parturition, metritis, strictures of the urethra, abuse of *Cantharides*, *Turpentine*, *Copaibæ*, or other drug, it has often proved efficient in our hands, if prescribed above the third dilution. Dr. Gordon has employed the infusion successfully in certain cases of inflammation of the bladder, which we insert below; but much experience with both palpable and impalpable doses has demonstrated to our minds the superiority of the latter in examples of this kind. (10.)

Dr. J. H. Gordon, of Wilson county, Tenn., affirms "that he has succeeded in removing the strangury, which was a common attendant on an epidemic metritis by an infusion of the bee. His practice was to sweep forty to sixty bees into a pan of water to make them manageable, put the whole into a tea-cup, pour one gill of boiling water upon them, and cover the cup securely. When it has remained twenty minutes, pour off the infusion, and let the patient take the whole at a draught. This remedy, he asserts, relieved the strangury in from two to fifteen minutes, with great certainty. He refers to other practitioners who have given the remedy numerous fair trials, and so far as he has learned, all estimate it highly. He has tried it repeatedly in retention of urine from inflammation of the bladder, and

from the effects of Cantharides, and found it to be more prompt and certain than any other remedy, and he says there can be no doubt that it will prove a valuable addition to the *Materia Medica*. How far it may be useful in *dysuria* and *ischuria* from every variety of cause, remains to be seen, but its known value affords abundant encouragement for further investigation. Dr. Flint, of Buffalo, states that it has been tried in that city with immediate relief, in a case in which the introduction of the catheter had been attempted without success; and it was subsequently repeated daily with the same results, until the occasion for its administration ceased.

Dr. Gordon considers the infusion to act as a narcotic, and that its properties are probably owing to the virus ejected with the sting. The tea when recently made has a smell identical with that of the incensed bee, and is then efficacious; but if the infusion be permitted to stand and cool, and especially to remain uncovered, the characteristic odor and taste disappear, and it is correspondingly inefficient. Hence he infers the virus is volatile, and requires care to prevent its escape. (16.)

The speedy relief witnessed by Dr. Gordon in strangury from this medicine, has induced him to draw erroneous conclusions with regard to its *modus medendi*. Had this gentleman been more familiar with the therapeutic law of the homœopathist, and thus been able to appreciate properly the powers of specific drugs, he would have had no occasion to ascribe a simple homœopathic drug action to general narcotic power. Had he been in the daily habit of observing rapid cures from properly selected homœopathic specifics, he would neither have been surprised at the promptness of the remedy, nor at a loss to explain its mode of action. Still more, had he prescribed his doses in *dilution* instead of *infusion*, the curative result would have been quite as speedy, and far more safe to the patient. (10.)

Menstruation.—Bearing down pain and sensation as if the menses would come on, in many cases. Bearing-down pains in the uterus as if the menses would come on, with aching and pressing in the hypogastrium. Metrorrhagia at the second month with profuse flow of the blood; heaviness of the abdomen; faintness; great uneasiness; restlessness and yawning. Hæmorrhage from the uterus, occurring in a lady who was always regular and healthy; occurring one week after the cessation of the usual menstrual period, and three days after taking the medicine. Miscarriages at the second, third and fourth months. Suppressed menstruation, (pathogenetic and curative effect in many cases.) (51.) Tenderness of the ovaries on pressure. Steady pains in the ovaries, with occasional bearing-down sensations in the ovarian and uterine regions. Sharp, cutting pains in the left ovary, worse at intervals, and extending down the thigh. Severe paroxysms of contractive and spasmodic pain in the right ovary, occurring every fifteen to twenty minutes, and each paroxysm lasting from one to three minutes. Six days previous to the monthly sickness

sensation of weight and heaviness in the ovaries; pressing pains at the *os uteri*, and after taking the second dilution, night and morning for three days, premature appearance of the menses, with unusually copious flow. Great tenderness over the uterine region, with bearing-down pains, leucorrhœa, and painful urination after four doses of the tincture. Profuse yellow leucorrhœal discharge. Green and acrid leucorrhœa, with frequent and painful urination. Conversion of an existing mild leucorrhœa, to one of a yellow and irritating character. General increase of heat and of vitality in the uterus and ovaries. (10.)

Clinical Remarks.—*Apis* evidently exercises a powerful influence over the uterus and its appendages. We were informed by Dr. Humphreys, that he had in several instances known it to produce miscarriages when given for various maladies during pregnancy. This testimony is corroborated by other physicians. We have not unfrequently prescribed it successfully in ordinary suppression of the menses. It is a question whether we ought to ascribe this specific influence to a direct action of the drug upon the uterine fibres, or to a reflex spinal influence. We are in doubt with regard to this point, but incline to accept the latter hypothesis.

Its action upon the ovaries is likewise strongly marked, as numerous pathogenetic and therapeutical facts demonstrate.

It may be regarded as a remedy of established value in suppressed menstruation, accompanied by inflammation or congestion of the ovaries; tenderness or pain in the ovarian region on pressure; bearing-down pains in the uterus; sensation of weight or heaviness in the region of the ovaries; irritation at the neck of the bladder; unusual heat and fullness of the uterine organs, and leucorrhœa. It is also an excellent remedy in uterine hæmorrhage, dependent on a relaxed and enfeebled condition of the menstrual organs. In such cases it imparts tone to the weakened parts, and thus enables them to resume their functions normally. As a remedy in acute and chronic ovaritis, it compares favorably with *Cocculus*, *Lachesis*, *Belladonna*, and the like. In several instances we have been highly gratified with its effects in chronic enlargements and indurations of the ovaries, especially when they have been accompanied by occasional paroxysms of severe pains. In the above examples we have usually employed from the third to the sixth dilutions. As a remedy in ovarian dropsy, it probably has no superior. We have had occasion to test its merits in many cases, and our experience warrants us in asserting that in the early stages of the malady it sometimes cures, while in the fully developed stage it is our best palliative. We have witnessed excellent effects from both high and low dilutions in this malady, but have been governed in the selection of doses, by the stage of the disease and the susceptibility of the patient. (10.)

Larynx and Trachea.—Hoarseness and rough voice, day and night, on second day. (51.) Heat and smarting in the throat, with occasional

hacking coughs. Dryness of the throat in the morning, causing cough and hoarseness. Hoarse voice and hoarse cough from irritation of the trachea. Hoarseness, with scraping in the larynx, and oppression of breathing. Symptoms worse in a warm room, and ameliorated in the open air. (10.)

Clinical Remarks. --In chronic laryngitis, characterized by hoarseness, dryness, and burning of the larynx, short, irritating cough, turns of oppressed breathing, symptoms worse at night in bed, or in a warm room, Apis, third dilution, is quite applicable. In several instances where Carbo-vegetabilis had failed to give relief, we have prescribed this medicine with good effects. It is appropriate in hoarseness and scraping of the larynx and trachea, caused by erysipelatous inflammation. (10.)

Dr. Kellogg has given the Apis with decided benefit in the case of a female who had suffered for years under symptoms of general prostration, particularly in cold weather, attended by asthmatic symptoms, as cough, choking pain in the chest, with coldness and deadness of the extremities, and purplish livid hue. Also in some cases of chronic sick headache, where there seemed utter prostration of the cerebral ganglionic nerves. (51.)

CHICAGO, Nov. 24th, 1857.

Dr. PETERS.

Since you request such items—and I have already reaped no little benefit from their insertion in your "New Materia Medica"—please credit me with curing a case of obstinate *night-cough*, four days old, following an attack of acute bronchitis, and which cough had resisted all the most appropriate remedies at command. The cough was not asthmatic, not attended by any peculiar or copious expectoration, not convulsive, not paroxysmal, but *incessant*, (at night,) or if it subsided, there was a perpetual and imperative call to resume it again. It continued each night from nine, P.M. to four or five in the morning. The patient was an old lady, aged seventy-two. The remedy, APIS-MEL-LIFICA 3d.

Very respectfully,

R. LUDLAM, M.D.

Chest.—Stitches in the left side of the chest. Sensation of aching heat in the region of the diaphragm, as if from running violently. Pressure in the chest, soon. Sharp pains and stitches through the chest and back at night. Hurried and difficult respiration, with fever and headache. Pain near the heart, almost arresting breathing at night, continuing at intervals for some days. Short, rapid breathing at night. Sensation of soreness, lame, bruised feeling, as if from a recent injury, from being jammed, bruised, or beaten; confirmed in many provers. Sensation of burning heat in the chest and stomach, early in the morning, second day. (51.) Sense of fullness, constriction, or of suffocation in the thorax; difficult and anxious respiration. Rapid, painful and spasmodic respiration, aggravated by lying down, and ameliorated by inhaling the fresh air in an upright posture. Burn-

ing and stinging pains throughout the entire front part of the chest. Slight pleuritic stitches in the sides of the chest. (10.)

Clinical Remarks.—A case of bronchitis, is reported by Dr. Bishop, cured by Apis. A child, two years old, with high fever; hot, dry skin; full pulse; laborious respiration, resembling croup; painless diarrhœa, yellowish, sometimes greenish and slimy; tongue slightly coated, white; disturbed sleep at night, with muttering, incoherent talking. Aconite, Bry., Hep., and other remedies, for three days without any benefit. Respiration very laborious, requiring unusual aid from the abdominal muscles; flushed face, with increasing livid appearance. Prognosis unfavorable. Next day, after having begun to take Apis 3, found her much better, face natural, pulse much improved, fever nearly gone, &c., &c. Cure effected on the fourth day. (51.)

A case of hydrothorax cured by Apis, is reported by Dr. Wells.—Mrs. C., aged fifty-eight, has been troubled with anasarca several years, and more recently has had decided symptoms of hydrothorax, as sensation of fullness in the chest, shortness of breath, pains, sometimes dull, at other times sharp, in the chest, inability to lie in a horizontal posture. Dec. 10th, 1850, commenced taking Apis 3 every two days for two or three weeks, and then at longer intervals, with complete relief of all of the symptoms. Saw her in June, 1851, quite well. (51.)

Dr. G. L. Freeman reports the following case of *Hydrothorax*.—Mrs. H., aged forty, of a bilious-nervous temperament, was troubled with a return of symptoms denoting *water on the chest*, for which she had been tapped some years before. Her respiration was much oppressed, she had much pain about the region of the heart, with a sense of *fluctuation* when turning on her side. There was swelling in that region, perceptible even without removing the clothing, and it was sensitive to slight pressure. Progressive emaciation, swelling of the feet and ankles, constant thirst. Ars. 3 afforded temporary relief. On a recurrence of the attack, I prescribed Apis-Mell., 2d trituration, a powder four times a day, for three days. Calling about a week after, the patient declared herself entirely relieved of all the above symptoms, and said that almost directly after taking the last dose, she had felt as if “something was breaking away” in the region of the heart, and that she had subsequently passed in one day about two quarts of urine of a greenish hue.

A case of asthma, by Dr. Wells.—Mr. N. P., aged seventy, had shortness of breath, oppression of the chest on taking an inspiration, and sensation of heat in the chest. These symptoms had been gradually increasing several weeks. Took Apis 3 once a day; was completely relieved in one week. (51.)

J. C. R., aged thirty-five, with the following symptoms cured by Apis 3, reported by Dr. Bishop. Sensation in the muscles of the chest as of having been bruised, jammed, or beaten; pain in the left side under the short ribs; shortness of breath, especially on exercise;

disposition to chilliness, and a peculiar prostration of the great central organic nervous power. The first dose of Apis 3 was followed by looseness, or painless diarrhœa. On the next visit he mentioned that as being *the* remedy, which he continued to take for a few days longer, when a perfect cure was accomplished. (51.)

Dr. Madden writes favorably of Apis in the treatment of hydrothorax, and other disorders connected with pleuritic inflammations. Its curative sphere appears to be confined to subacute inflammations of the serous membranes of the thorax, either with or without effusion. But as it is probable that no subacute inflammation of the pleura or pericardium can exist without an abnormal secretion of serum, it would be proper to say that this drug is homœopathic to that condition of the serous membranes which is characterized by morbid serous effusions. It acts specifically upon all serous membranes, producing inflammation, pain, heat, burning, soreness, and dropsical effusions. We are disposed from much experience in these cases, to rank it among our very best remedies. Our mode of administration is the same as in ascites. (10.)

Dr. Wells has cured the following train of symptoms in a man with pains in the left hypochondriac region, extending upwards into the chest. This case of several years' standing, had not been benefitted by remedies such as Arnica, Sulph., &c. A few doses of Apis 3, removed the whole. (26.)

Case by Mad. De Bonneville.—A man of twenty-eight years, sanguine-nervous-bilious temperament. Sudden paralysis of the entire right side, with violent delirium, at times amounting to frenzy. Gave Apis 1st, as I learned from his wife that he had before this attack sudden whitish swellings upon his head at times, also on the neck, accompanied with *violent itching*. In less than an hour after having taken the medicine, he was broken out in countless places upon his head, which had the effect of much quieting his mind. Used the Apis several times afterwards in this case, always with marked success. (51.)

Back and Neck.—Rheumatic stitches in the muscles of the right side of the neck, worse on motion. Tension in the right side of the neck, beneath and back of the ear. Sudden flush of heat over the back, as though sweat would break out, accompanied by a pain at the left ileo-sacral articulation. Dull pressure under the scapula, with sore feeling on motion. Pain in the back under the scapula, worse on moving. Stiffness in the small of the back. (51.) Weakness of the back, obliging him to lie down. Stiff and weary feeling in the lumbar muscles. Itching eruption like urticaria covering the entire back, and extending up the back of the neck to the hairy scalp. Blotches on the neck and back, which itch and smart on rubbing and scratching them. Pain and soreness in the region of the kidneys, on pressure, or on stooping, constant dull pains in both kidneys, with very small secretion of red urine, (from repeated doses of the twelfth dilution.) (10.)

Clinical Remarks.—Among the prominent pathogenetic effects which we have personally experienced on several occasions during our provings, was a sense of weariness and dull pain in the kidneys, accompanied by depression of spirits, lassitude, and scanty secretion of high-colored urine. On each of these occasions we have unfortunately neglected to submit the urine to proper tests for albumen, acids, or alkalies. These tests are all important; for without an accurate knowledge of the chemical composition of this secretion, it is impossible to form a correct judgment with regard to its homœopathicity to such maladies as Bright's disease, calculous affections, nephritis, &c. The local symptoms of these disorders are sometimes almost precisely alike; so that, were we to decide upon our remedy from these phenomena alone, we should often make injudicious selections. It is only by making chemical analyses of the urine while the kidneys are affected by the drug, that we can acquire the knowledge requisite to determine whether the Apis-disease of the kidneys corresponds to Bright's disease, or nephritis, or to some other affection of this organ. But in several cases of albuminuria we have ventured to prescribe Apis, where most of the local and general symptoms have properly corresponded, and in a few instances the results have been flattering. In these cases we have been able to reduce the dropsical effusions, to remove the renal pains and soreness, to re-establish the urinary secretion, to diminish the quantity of albumen in the urine, and to restore the patient temporarily to a comfortable condition. In three instances we have apparently effected permanent cures by the use of Corrosive Mercury, (second trituration,) and Apis, (first dilution,) administered in rotation. (10.)

Superior Extremities.—Fiery burning at the points of the fingers. Tingling of the fingers of the left hand. Dull pains apparently in the bones of the arms and fingers. Aching in the right shoulder and upper portion of the arm. (51.) Red spots upon the arms, hands, and fingers, which itch and burn very much. Edematous appearance of the hands and fingers. Feeling of stiffness in the hands and arms. (10.)

Clinical Remarks.—An old woman, aged eighty, sanguine-nervous-bilious temperament, had a white puffy swelling on a paralyzed arm and hand. Three doses of the Apis, one given daily, produced an entire removal of this symptom. About three months afterwards, the same person, from excessive grief, became paralyzed upon her entire right side. Some ten days after her second stroke, the same symptom, swelling, occurred over the entire side, entirely closing her right eye. A few doses of Apis entirely removed this symptom. (51.)

Inferior Extremities.—Fine burning stinging on the knee. Edematous swelling of the extremities. Darting, transient pain in the external malleolus of the left ankle for four days. Dull pains as if in the bones of the lower extremities, disappearing on walking, returning again while sitting. Burning of the toes, and redness like erysipelas and heat of a circumscribed patch on the foot, while the remain-

der of the feet is cold, continuing half an hour. At night on removing the boots and socks, the feet were found swollen full, with a sensation of heaviness and rigidity; the upper part of the feet felt bungling and itched, and were of a bright red color. The soles of the feet and balls of the toes had a feeling of painful fullness, and in walking gave a sensation as if cushioned; sixth day from large doses. (51.) Œdematous swelling of the legs and feet, with sensation of weariness and stiffness when attempting to walk. Itching eruption, like urticaria, upon the posterior portion of both thighs. Bruised and sore feeling in the feet. (10.)

Clinical Remarks.—Two cases of swelling about the knee-joint, are reported by Mad. De Bonneville, as cured by Apis. Case 1st occurred in a man forty-five years old, of a nervous-sanguine temperament, and who had painful puffy swellings of both knees. Five doses alternated with Iodine at intervals of three days, cured the affection.

Case 2d occurred in a young man aged twenty, of a sanguine-bilious-lymphatic temperament, who had been thrown from a horse and received a severe sprain in his left knee. One dose of Apis cured the swelling. Some two weeks afterwards, from standing upon it too much, the knee again became swollen, and one dose of Apis again removed the swelling. (51.)

It is one of our most homœopathic remedies in *hydrops articuli*, and may be used with advantage both internally and externally. As a remedy in œdematous swellings of the legs and feet, it deserves much consideration. Its merits as a remedy in erysipelatous affections of various parts of the body have already been discussed. (10.)

APOCYNUM-ANDROSÆMIFOLIUM.

DOG'S-BANE. MILK-WEED. BITTER-ROOT. FLY-TRAP.

AUTHORITIES.

Wood and Bache. (7.) Waring's Ther. (44.) Pereira. (3.) Dr. Henry. Phil. Jour. of Hom., Vol. 3, p. 368. (71.) King's Dispensatory. (56.) Peters. (11.) Watson, of Uica. (54.) Küttner's Phænomenologie. (55.) Snelling. (46.)

GENERAL REMARKS.

Dog's-bane is an indigenous, perennial, herbaceous plant, from three to six feet in height, and abounding in a milky juice, which exudes when any part of the plant is wounded. The stem is erect, smooth, simple below, branched above, usually red on the side exposed to the sun, and covered with a tough, fibrous bark. The plant flourishes in all parts of the United States, from Carolina to Canada. It is found along fences and the skirts of woods, and flowers in June and July. The root is the part employed. This is large, and like other parts of

the plant contains a milky juice. Its taste is unpleasant, and intensely bitter. Bigelow infers that it contains bitter extractive, a red coloring matter, soluble in water, and not in alcohol, *caoutchouc*, and volatile oil.

The powder of the recently dried root acts as an emetic in doses of thirty grains, and is said to be sometimes employed by practitioners in the country for that purpose. By Dr. Zollickoffer it is considered a useful tonic, in doses of from ten to twenty grains. Dr. Bigelow states that its activity is diminished, and eventually destroyed by keeping. It is among the remedies employed by the Indians in *lues venerea*. (7. 46.)

It is stated to be an excellent substitute for *Ipecacuana*, by which name indeed it is known in the Eastern States. It is employed in the same class of cases. (44. 46.)

Pereira says its properties are emetic and diaphoretic. It promptly induces vomiting, with slight preceding nausea, on which account it may be given in cases where it is merely requisite to evacuate the stomach, as no relaxation is induced. He speaks of it as admirably calculated to improve the tone of the digestive apparatus. (3.)

Dr. Watson, of Utica, says it has been regarded as alterative, tonic, aperient, diuretic, detergent, deobstruent, emetic, diaphoretic, and anthelmintic. According to Dr. Henry, it is used in all forms of bilious diseases, by the country people of South Carolina, in the marsh fevers of the rice plantations, yellow fever, syphilis, gonorrhœa, colds, inflammations of the bowels and lungs, constipation from chronic liver complaint, and dyspepsia. It seems to exert a specific action over the abdominal viscera, and has also been given to increase the secretion of milk. (71.) It has also been employed in scrofula, rheumatism, dysentery, diarrhœa, amenorrhœa, diseases of the stomach and kidneys, intermittents, and the low stage of typhoid fevers. (56.)

EXPERIMENTS ON THE HEALTHY.

Dr. J. H. Henry, of Charleston, S.C., has obtained the following symptoms, by proving the drug on himself and two ladies. He began with 50 drops of the tincture from the fresh root, and increased to 1800. All the provers seemed to be well when they commenced taking the medicine, with the exception that one of the ladies had suffered from leucorrhœa, and Dr. H. himself had suffered from hæmorrhoids. The three provers commenced by each taking fifty drops, fasting, in the morning. Two of them felt *cramps in the bottoms of the feet*; the third had violent *heat in the bottoms of the feet*, with profuse sweating of the whole body.

Clinical Remarks.—This remedy would seem to exert a specific action upon the feet, and promises to be useful in many affections of these important organs. A constant burning heat in the soles of the feet sometimes precedes an attack of painter's colic; it is also a symptom of poisoning with Arsenic, or of the excessive use of alcohol, especially in

women. Burning heat of the soles of the feet, especially after meals, and in the evening is a well-known accompaniment of hectic fever. When the previously icy-cold feet of dropsical persons become permanently hot, we can generally predict approaching death. (55. 11.)

Persons who suffer constantly, or from the slightest causes, from great coldness of the feet, are usually the subjects of abdominal disease, of weakness of digestion, of hypochondriasis, of a mucous state of the primæ viæ, of infarctions of the abdominal organs, or disease of the liver or spleen. It will be seen, subsequently, that this remedy acts specifically upon the abdominal organs. Great tendency to coldness of the feet in young persons, is also supposed by some to show a tendency to rheumatism and gout. (55. 11.)

May 15th.—Each took 100 drops of the strong tincture. All felt cramps and burning in the bottoms of the feet, most severely, according to Dr. Henry, in his *right foot*, with severe pain in the joint of the left big toe, and heat in the right leg and knee. One of the ladies and Dr. H. complained of great fullness and pain in the head, of an indescribable character. The next morning, the three provers complained of constipation of the bowels.

Clinical Remarks.—The same specific action upon the feet is evidenced in these experiments, with the addition of heat in the *right* leg and knee, and pain in the *left* toe-joint. Cramps and burning in the sole of the right foot often points to disease of the liver. The pain in the toe caused by it, points to its homœopathicity to rheumatism, or more probably gout, as the Apocynum acts specifically upon the digestive organs and liver, which are always disordered in gout. It is homœopathic to constipation when attended with great fullness and pain in the head. We trust that the proper use of this remedy will prevent the excessive routine use of Nux in so many cases of constipation and headache, in which it is not at all indicated, and hence not homœopathic. Homœopathic physicians should ever recollect that every badly-selected homœopathic remedy can only act antipathically or allopathically; we believe that nearly three-fourths of all the prescriptions made by ordinary homœopathic physicians, even those who pride themselves most upon their orthodoxy, are not really homœopathic prescriptions; and it is evidently in the highest degree absurd to give infinitesimal doses of remedies which can only act allopathically, if they act at all. Whenever I do not know of a remedy which is strictly homœopathic, both to the symptomatology and pathology of a given disease, I prefer giving reasonable doses of a strictly and truly antipathic remedy. (11.)

May 16th.—All took 150 drops, and experienced about the same symptoms as on the 15th. Dr. H. felt *tingling pains in his toes*, sharp pains in the middle, *trembling* of the body in two provers; most delightful taste in the mouth of each. Everything smelled like honey to Dr. H. All complained of *pains in different parts of the body*, and Dr. H. of much pain in his *knee and right shoulder*. The ladies complained of *pain in all the teeth* of the lower jaw, left side.

Clinical Remarks.—The homœopathicity of the remedy to rheumatism and gout, becomes more and more evident as larger doses are taken. We trust that the proper use of this remedy will prevent the excessive routine use of *Rhus*, *Bryonia*, *Pulsatilla*, &c., in rheumatic and arthritic affections. (11.)

An habitual and annoying *tingling* and itching of the feet, aggravated to an extreme degree by warmth, by sitting still, and stimulating food, is often a sign of gouty acridities in the system, and frequently precedes an actual attack of gout for a long time. (55. 11.)

It may prove antipathic and palliative, or even curative to many bad tastes in the mouth, and some illusions of smell. It is no easy matter to find a remedy which will cause a pleasant, much less a delightful taste in the mouth, even temporarily. (11.)

The generation of odors in the nostrils has often a diagnostic and prognostic meaning. Thus the perception of pleasant, but not actually present smells, is a not uncommon accompaniment of nervous disorders, recurring paroxysms of which are thus often indicated. A persistent smell of musk and amber often occurs in hysterical subjects. An illusory smell of violets often precedes an attack of epilepsy. (55. 11.)

An unusually *sweet taste* in the mouth, not unfrequently occurs in the crude stage of fevers, and in some nervous affections. Hypochondriacal and hysterical persons not unfrequently complain of an annoying sweet taste in the mouth. In some cases a sweet taste in the mouth arises from an absolutely saccharine condition of the saliva, a phenomenon which is sometimes observed in cachectic and consumptive persons, especially in diabetic subjects and in chronic lead-poisoning. (55. 11.)

May 17th.—Each took 200 drops. Neither, except Dr. H., felt the cramps in the bottoms of the feet. All experienced symptoms like those felt on the 16th inst.; pains and stiffness in the back of the head and neck; dull, heavy pain when breathing, seeming to go from above, downwards.

Clinical Remarks.—Cramps in the soles of the feet is produced in a marked degree by *Colchicum*, which is very similar in its action to that of *Apocynum-Androsæmifolium*; these are often supposed to arise from irritation of the stomach and bowels, or liver, but it is equally probable that some of the drug is actually absorbed into the blood, and acts as specifically in its way upon the feet, as Mercury does upon the gums or liver, or Tartar-emetic upon the stomach.

We know of but few remedies which so decidedly produce pains in almost all parts of the body, in the knee-, toe- and shoulder-joints, in the teeth, and in the head and neck. Dr. J. H. Henry, of Charleston, S.C., deserves great credit for giving us so rich, yet so clear a proving of this valuable remedy. (11.)

May 18th.—Each took 250 drops. Dr. H. and one of the ladies suffered from a painful bilious diarrhœa.

May 19th.—Each took 300 drops, and experienced heaviness of

the body, with a great desire to sleep; flying pains in different parts of the system; pain in the head and back of the neck; swollen sensation of face and body; violent *itching* of body and face.

Clinical Remarks.—This remedy, which in smaller doses seemed to cause torpor of the liver and constipation, in larger ones seems to produce an opposite train of symptoms, viz.: painful bilious diarrhœa. We have often drawn attention to the fact that small doses of a drug may be antipathic to a state to which large doses are homœopathic. (11.)

Tendency to sleep is often an attendant of *polycholia*, or excess of bile in the system. (11.)

Flying pains all over the system are also frequently produced by the irritation of an excess of, or an abnormal state of the bile circulating in the blood; hence these pains are not always rheumatic, but may arise from bile, urea, or some other acidity, or from some of the elements of suppressed perspiration circulating in the blood. (11.)

A swollen sensation of the face and body sometimes arises from an absolute febrile or plethoric expansion of the blood, but frequently is a purely nervous sensation. It is felt in a marked degree in persons under the influence of the Root of Aconite, and is similar to that which is felt when the foot is said to be asleep. (11.)

The *violent itching* of the body and face deserves attention. This may have arisen like that which follows the use of Opium and Morphine, from the absorption of the drug into the blood, and the casting out of it through the skin; this view gathers strength from the fact that in the first experiments with fifty drop doses, *profuse sweating* all over was caused. (11.)

As regards the diagnostic and prognostic value of itching of the skin, we may add that it often precedes the outbreak of perspiration, and remains a long time after this has ceased, especially if acridities have been ejected, as in gouty subjects. (55. 11.)

It is also frequently a sign of plethora; a slight itching, especially on the chest, arms, back and thighs, is very common in plethoric young persons in the spring of the year, and is most troublesome while undressing. (55. 11.)

In Cairo it is said that a violent itching of the skin is very common when the Nile is rising.

A general violent itching is very common in persons suffering with the suppression of some accustomed hæmorrhage, such as menstruation, or the hæmorrhoidal flux; this may degenerate into a hepatic eruption. (55. 11.)

The like may occur from the suppression of foot-or arm-perspirations, or of chronic eruptions, or from the sudden cure of old ulcers; or it may arise from disturbances of the urinary secretion, as in asthmarinosum, of which it is nearly a constant accompaniment. (55. 11.)

A violent and persistent itching over the whole body, or only on single parts, points to the presence of an irritating acidity in the

blood, although it may depend upon derangement of the nervous system. (55. 11.)

An habitual and exceedingly troublesome itching is very common in persons suffering with irregular or atonic gout, or with hæmorrhoids, or abdominal infarctions, or worms, disease of the kidneys, or gravel. It is also not uncommon in chronic poisoning with Mercury or Arsenic. (55. 11.)

When disease of the heart has proceeded far enough to cause great obstruction in the venous circulation, violent itching may arise from the too vascular state of the skin, or from the exosmosis of some of the salts of the blood which are detained too long in the enlarged blood vessels, instead of passing on to the capillaries. (11.)

Slight itching, attended with falling out of the hair, is often a sign of venereal disease. (55. 11.)

Very violent and insupportable itching about the genitals, and afterwards about the head and navel, without falling out of the hair, is said to be a sign of constitutional gonorrhæal disease. (55.)

Violent itching is often present in delirium tremens. (55.)

Violent itching which appears or is much increased by warmth or stimulating food or drinks, often depends upon plethora, acridity in the blood, prurigo or scabies. (55.)

Itching which is increased by the application of cold, generally arises from nettle-rash. (55.)

When the itching is confined to the lower parts of the body, it often arises from derangement of the kidneys. (55.)

Itching which arises towards the end of febrile diseases, is frequently the precursor of benign eruptions, or of a critical perspiration. (55.)

Violent itching of the skin, especially at night, is not uncommon in bilious and jaundiced persons, and when accompanied with profuse sweats, we may expect a speedy cure of the disease. (55.)

It is very common in aged persons, and often denotes disturbance of the urinary secretion, or acridity of the blood, or arises from increasing torpor of the skin; it may increase to true prurigo senilis.

Excessive itching of the skin in young persons, sometimes precedes the outbreak of consumption, especially if improperly suppressed. (55.)

When it occurs in connection with sudamina, especially after the suppression of diarrhœa in hectic persons, it is often a sign of great danger. (55.)

When it is excessive in varioloid; it often denotes a severe attack of the disease. (55.)

May 20th.—Each took 350 drops, and experienced all of the above symptoms, with profuse flow of clear urine; pulsating pain in the back of the head and between the right hand and elbow; constipation of two provers; diarrhœa of the third, with much pain and rumbling; only two evacuations, but copious and affording much relief.

May 21st.—Each took 400 drops, and experienced much pain all over the head; stiffness of the neck; pain on turning to the left side; itching and burning of the face; much lassitude; frequent passing of clear urine.

May 22d.—Each took 450 drops, and felt all the previous symptoms, together with great sneezing, twitching of the face, *most violent pains in all the joints*, great itching and irritation in left nostril.

May 23d.—Each took 500 drops. Violent pain in the left zygomatic process; chilliness; lassitude; heat of the head and neck; inability to sleep at night; violent dreams; sleep not refreshing; pain in the left groin of a shooting character.

May 25th.—Each took 550 drops. Ladies suffered from *profuse menstruation*, lasting eight days, with violent pressing pain; other symptoms as before.

May 26th.—Each took 650 drops. Some efforts to vomit; pain increased in back of neck and extending to front; pains severe above each wrist; four bilious evacuations, two in one prover, and constipation in the other.

May 27th.—Each took 1800 drops. All sick, vomiting, purging, great prostration, great trembling of the body.

Clinical Remarks.—The latter experiments produced the pains in the muscles, nerves and joints in a more severe degree, and also developed the diuretic, emetic and cathartic powers of the drug. (11.)

ON THE NERVOUS SYSTEM.

On the Nerves of Sensation.—Although this remedy produces a great many pains, and pain implies that the nervous system is involved, still it would seem that there were not simple nervous pains or neuralgias, but rather simulated rheumatic or dyscratic pains. (11.)

Clinical Remarks.—It may prove useful in rheumatic neuralgias, or such as arise from some acidity in the blood, which irritates the nerves and thus causes pain. If this be a true supposition, the Apocynum-Androsæmifolium may have to be given in sufficient doses to produce some of its depurating effects, such as perspiration, bilious diarrhœa, or profuse flow of urine. (11.)

On the Nerves of Motion.—It has produced cramps in the soles of the feet; pain and stiffness in the back of the neck; great sneezing, twitching of the face, &c.; yet it seems to act far more specifically upon the fibrous tissues and nerves of sensation than upon those of motion. (11.)

ON THE VASCULAR SYSTEM.

On the Blood.—Its action upon this fluid has not been fully studied out; it is probable, however, that much of the medicine is absorbed into the blood, and is carried into every part of the system, causing pains and irritations in many parts, especially in the feet, joints, head, teeth, back of the neck, *flying pains all over the system*, pulsatory pain in the

back of the head, great irritation and itching of the nostrils, violent pain in the left zygoma, shooting pain in the left groin, profuse menstruation with violent pressing pain, &c. (11.)

Clinical Remarks.—We are not justified as yet in regarding it as homœopathic to any other blood-disease, or dyscrasia, than the rheumatic or arthritic, perhaps to the pruriginous. The only hæmorrhage to which it seems homœopathic, is the menstrual. (11.)

Heart and Arteries.—Its action upon these organs has not been accurately determined. It has caused violent heat in the bottoms of the feet, with profuse sweating all over; heat and pain in the toes, legs and knees; swollen sensation of the face and body, with violent itching of these parts; *pulsatory* pain in the head and back of neck, and between the right hand and elbow; chilliness; heat of the head and neck, so that one cannot sleep at night, with troublesome dreams. (11.)

Clinical Remarks.—According to Dr. Henry, it has been much used among the blacks of the South in bilious diseases and fevers, in the marsh fevers of the rice plantations, in yellow fever, in colds and inflammations of the bowels and lungs, in dysentery and rheumatism. Of all these it seems most homœopathic to bilious fever, especially when attended with bilious diarrhœa, or when it is desirable to produce this; in rheumatic catarrhs and dysenteries, and in painful and inflammatory rheumatism. (11.)

ON THE TISSUES.

On the Fibrous Tissues.—This seems to be the great field of its action. It has produced cramps in the feet, probably in the muscles and tendons; great pain in the joint of the left big toe; heat in the right leg and knee; tingling pains in the toes; pains in different parts of the body, but especially in the knee and right shoulder; pains and stiffness in the back of the head and neck; dull heavy pain in the chest, while breathing; flying pains all over the system, especially in the head and back of neck; much pain all over the head, with stiffness of the neck; pain on motion, or turning to the left side: *most violent pain in all the joints*; great pain in all the left side of the head; pain above each wrist-joint; pain in the back of the neck, extending forwards, with increase of pain above each wrist-joint. (11.)

Clinical Remarks.—It must be remembered that the above effects were produced by large doses, and were felt by several persons, in fact by all the provers, so that there can be no rational doubt that they are the true results of the action of the drug. I believe with Dr. Henry, that this is the proper way to prove remedies on the healthy subject; to give them in such large doses that we can be sure of the symptoms, and to record nothing but prominent symptoms.

In rheumatism and rheumatic gout, it is, perhaps, the most homœopathic remedy that we are yet acquainted with; it may be most suitable in bilious subjects, or where there is a prominent bilious disorder in connection with the rheumatism. As the above effects were pro-

duced by large doses, it may be that none but large doses will prove homœopathic; in some cases it may be justifiable and necessary to give large enough doses to produce the sweating, purging, or diuresis, which seems to be the natural termination of the Apocynum-rheumatism; for often the dose must be homœopathic not only to the crude stage of the disease, but also to the crises and natural evacuations and terminations of the disorder; homœopathic not only to the formative and aggressive stage of the disease, but also to the depurative and eliminative processes. Thus it is well known that Mercury will cause rheumatism; and a mercurial purge is more specific when purgation is required than Castor-Oil. A.-Androsæmifolium seems a likely remedy to be absorbed into the system, to penetrate in the most searching manner into every nook and cranny, into which rheumatism or gout may work, to act specifically upon the parts occupied by these diseases, and then to produce those critical evacuations from the skin, liver, bowels and kidneys, which terminate an attack of rheumatism, and purify the system from those derangements of the fluids which keep up the disorder, while it acts upon and occupies those portions of the solids which were the seat of the rheumatic or arthritic attack in such a material and actual manner, that the former must necessarily be dislocated and expelled, in accordance with the truism that two different actions cannot go on at the same time in the same place. (11.)

On the Mucous Tissues.—We have no decided evidence that A.-Androsæmifolium acts specifically upon any of the mucous membranes, although it has produced great sneezing, also great itching and irritation of the nostrils. (11.)

Clinical Remarks.—It is homœopathic to rheumatic and bilious catarrhal affections; many physicians are not aware of the frequency with which catarrhal affections are caused or kept up by the previous presence of a bilious or rheumatic state of the system. (11.)

On the Dermoid Tissue and Skin.—It is generally regarded as a most active sudorific; fifty drop doses caused a profuse sweating all over; 250 drop doses caused a swollen sensation of the face and body, and violent itching of the body and face; 400 drops caused itching and burning of the face; 450 drops, great itching and irritation in the nostrils.

Clinical Remarks.—It is homœopathic to profuse perspirations, and may also be used to cause perspiration when this is a natural or desirable feature of the disease under treatment. It may prove homœopathic and curative to some of the severer forms of prurigo, especially prurigo senilis, when attended with derangement of the liver or kidneys. (11.)

Head.—Doses of 100 drops caused great fullness and pain in the head; 200 drops caused pains and stiffness in the back of the head and neck; 250 drops, pain in the head and back of neck, swollen

sensation of the face and body, and violent itching of the face and body; 350 drops caused pulsatory pain in the back of the head, and between the right hand and elbow; 400 drops, much pain all over the head, with stiffness of the neck; 500 drops caused chilliness, lassitude, heat of the head and neck, with sleeplessness and troublesome dreams during the disturbed sleep; 600 drops caused great pain in all of the left side of the head, with pain above each wrist-joint.

Clinical Remarks.—It is homœopathic to bilious, rheumatic, and congestive headaches, especially when attended with rheumatic pains in many other parts, preceded by constipation, and followed by diarrhœa, attended with swelling and itching of the face, and terminating with profuse flow of urine and more or less perspiration. (11.)

Stomach and Bowels.—We are told that it acts as an emetic; that in large doses it promptly induces emesis, causing scarcely any previous nausea. (71.) It is said to require thirty grains of the recently dried root to act as an emetic; by some practitioners it is regarded as an excellent substitute for *Ipecac.*, and in fact is called *country-Ipecac.* in some of the Eastern States.

Doses of 250 drops caused bilious and painful diarrhœa, without any mention of nausea; 350 drops caused constipation in two persons, but diarrhœa in another, attended with much pain and rumbling, but only two large evacuations, giving much relief; 600 drops caused some flying pains in the stomach, fullness and pain in the right side, (region of liver?) with feeling as if something would pass the bowels, and slight nausea; 650 drops caused some efforts to vomit, without pain, four bilious evacuations in one prover, two in another, and constipation in the third; it seemed to produce constipation and diarrhœa every alternate day; 1800 drops caused sickness, vomiting, purging, great prostration, and much trembling of the body. (71. 11.)

Clinical Remarks.—Dr. Zollickoffer regards it as a useful tonic to the stomach and system generally, in doses of from ten to twenty grains; Pereira speaks of it as admirably calculated to improve the tone of the digestive organs, and says, as in full doses it promptly induces vomiting, with slight preceding nausea, it may be given in cases in which it is merely requisite to evacuate the stomach, without producing general relaxation of the system.

It seems homœopathic to bilious diarrhœa, with more or less pain in the bowels and region of the liver; also to alternating diarrhœa and constipation, and to constipation like that arising in jaundice, when the bile does not find its way into the bowels, but is retained in the blood and tissues. It is indicated in bilious headaches; also in bilious fevers when there is much heat and pain in the head, great tendency to drowsiness, or restlessness with troublesome dreams, and either bilious diarrhœa, or a bilious constipation; it will be still more indicated when there are severe bilious or rheumatic pains in the limbs, back and joints. (11.)

It is used in all forms of bilious disease by the country people of

South Carolina, in the marsh fevers of the rice plantations, in constipation from chronic liver complaint, dyspepsia, diarrhœa and dysentery. (71. 11.)

Urinary and Genital Organs.—Doses of 350 drops produced profuse flow of clear urine; 400 drops, frequent passing of clear urine; 550 drops, profuse menstruation, lasting eight days, and attended with violent pressing-down pain; one of the ladies was troubled with leucorrhœa before taking the medicine, she is now well and has not had the least return. (71.)

Clinical Remarks.—It is homœopathic to some forms of diuresis and irritability of the bladder; it is antipathic when the urine is scanty and turbid; it is homœopathic to profuse menstruation, and will cure some cases of leucorrhœa, whether homœopathically or antipathically has not been determined. (11.)

Superior Extremities.—Doses of 150 drops produced pains in different parts of the body, and among them in the right shoulder; 350 drops produced a pulsating pain in the back of the head, and between the right hand and elbow; 450 drops produced *most violent pain in all the joints*; 600 drops caused great pain in all the left side of the head, and above each wrist-joint; 650 drops caused pain in the back of the neck, extending forwards, and increase of pain above the wrist. (71.)

Clinical Remarks.—It seems homœopathic to muscular and articular rheumatism.

But pains and swellings do not form the totality of the phenomena of rheumatism; in this disorder there is also a great excess of *lactic acid* in the system. (See Report on Rheumatism in the May No., 1856, of this Journal, p. 563.)

There are two great sources of lactic acid in the animal economy; *first*, almost all the amylaceous portions of the food are converted into sugar, and this together with the saccharine substances taken as food are changed into lactic acid; hence lactic acid occurs abundantly in the contents of both the small and large intestines; from thence it undergoes rapid absorption, and in the healthy state is quickly disposed of in the system. There is great reason to suppose that in rheumatism the lactic acid derived from the *primæ viæ* is not thus rapidly disposed of. Thus Lehmann found, after taking one-half ounce of Lactate of Soda, while in health, that in thirteen minutes his urine had become alkaline; again, on injecting the same salt into the jugular vein of a healthy animal, it appeared in from five to twelve minutes as Carbonate of Soda in the urine. There is much reason to conclude that the excess or even normal amount of lactic acid absorbed into the blood of rheumatic subjects cannot be so easily appropriated or decomposed. This lactic acid which is formed in the *primæ viæ* from the fermentation of sugar, is called the *beta-lactic acid*. (11.)

Again, Berzelius first discovered the existence of lactic acid in the juice of the muscles; while Liebig showed that, *in quantity there is*

more present in the muscles than is sufficient to neutralize the alkali of all the other liquids or juices of the body. (11.)

The blood is always alkaline; the degree of its alkalinity differs in various diseases; in rheumatism there is every reason to believe that it is much less alkaline than in health. The alkaline properties of the blood are due to the presence of the Carbonate and Phosphate of Soda; the Phosphate of Soda, according to Draper, enables the serum of the blood to hold the Phosphate of Lime in solution, in order to be carried to the bones, and it also enables the serum to hold Carbonic-acid in solution, and thus maintains a relation to the respiratory function. Finally, there is three times as much Sodium in the serum as in the cells, and ten times as much Potassium in the cells as in the serum. These are simple facts in physiology. In the normal state of the blood there must be certain proportions of Phosphate and Carbonate of Soda and Potash, and also of Phosphate and Carbonate of Lime and Magnesia. In rheumatism this normal proportion of alkaline salts is not present; and it must often be supplied artificially, just as Iron is given in chlorosis, or as food and drink are given to thirsty or hungry men. (11.)

In fact we may assume that it is useless and almost absurd to put infinitesimal doses of appropriate rheumatic remedies into intensely lactic acid-primæ viæ, or to suppose that they will exert a curative influence against rheumatic blood, which is too slightly alkaline; or if they finally, which is almost inconceivable, do reach the intensely acid rheumatic muscles and other fibrous tissues, that they can exert a curative action in the presence of a large quantity of intensely acid muscular juice.

In accordance with what might have been expected, the celebrated Drs. Wurmb and Caspar, the honest and philosophical physicians to the Leopoldstadt Homœopathic Hospital at Vienna, found little or no benefit from the high dilutions in rheumatism. Under expectant treatment, without the aid of medicine, the average duration of all cases of *acute muscular rheumatism* was nine days; under homœopathic treatment with the high dilutions, some cases ran their course in four, six, and eight days, while others lasted from eighteen to thirty days.

Under expectant treatment the average duration of *acute articular rheumatism* is from twenty to thirty days; a few cases recover in from eight to twenty days, and about as many linger from thirty to fifty days. While in Wurmb's and Caspar's cases in only seven out of forty-seven was the duration under twenty days, while others lasted thirty, forty, fifty, sixty and even seventy days.

Hence they draw the conclusion that "the strict homœopaths unfortunately have no cause to be contented with their present treatment of rheumatism, for it is not one to boast of; some splendid cures or recoveries have taken place, but this does not occur as a general thing, and most homœopaths labor under the disadvantage of not daring to recognize or make known this truth. Among the chief obstacles in the way of perfecting our mode of cure is:

1st.) The too great honoring of our system and self-esteem; for the sake of one or the other we have generally been silent, when our success was not such as we wished; on the other hand, we have often blown our trumpet loudly when our success has fallen out luckily; our literature, consequently, contains almost only records of successful cases, while the unsuccessful ones are not published, and thus many a colleague is cheated into a belief of the infallibility and perfection of our system. (See British and For. Rev., Vol. XI., p. 220,) the editors of which say that the tone of Wurmb and Caspar's report denotes not only a love of truth in the writers, and a freedom from all partizanship, but it also strongly indicates the healthy condition of Homœopathy in Vienna. The advice tendered, though it may appear to deal roughly with some of our idols, will no doubt be generally received in the same spirit in which it is given. Gradually as our system gains in years and in adherents, we will become more liberal in tone and free from the autocratic sentiment. The exclusivism which is pardonable, nay, to be admired in the Founder, until his system obtained a historical foundation, degenerates into arrogance and vanity in the mere Disciple.

I should strongly recommend the use of *Phosphate of Soda* as a dietetic agent in rheumatism; this salt is inodorous, has a pure saline, not disagreeable taste, very similar to that of common salt, but much feebler; it is as much a natural constituent of the body, and not more medicinal than the Muriate of Soda, or common table salt; it may often be administered to a patient without his knowledge, by substituting it for common salt; it is said that a purgative dose of it may be given, deposited in a bowl of soup or gruel, and the patient not be aware that he is taking anything more than common salt with his food. Used as a common drink in water, or taken in drachm doses in solution regularly, it may neutralize the excess of lactic acid, and permit specific remedies to act in smaller doses than they otherwise would. (11.)

Lemon-juice, which is a Citrate of Potash, with a slight excess of Citric-acid, has lately gained a wide reputation in the cure of acute rheumatism; the Potash alone, is absorbed into the blood, and is the active agent in the cure; it is much more agreeable and quite as efficacious as Nitrate of Potash. I generally let my rheumatic patients drink lemonade as freely as they desire. (11.)

When the bowels are costive, I usually prescribe the Citrate of Magnesia, which is almost as pleasant as lemonade, and hardly more medicinal, although more laxative. (11.)

When the joints are exceedingly swollen and painful, I apply flannels wet with a warm solution of Soda in water, covering the whole with oiled silk. Sponging off the whole surface with a weak solution of soda in water, gives great relief from the drenching acid sweats which often attend rheumatism. (11.)

With the aid of these simple expedients, I am confident that my rheumatic patients are made much more comfortable; some of the

material obstacles to rapid production of a cure are removed, and the specific remedies are brought to act upon a much more pure and cleanly state of the system within and without, than when all the secretions and excretions are neglected. (11.)

When the febrile symptoms run high, *Aconite-rad.* and *Stibium* are the most reliable remedies, although they are often useful in some sub-acute cases. (11.)

When there is great œdematous swelling, *Rhus* proves very useful, although *Euphorbium*, *Cantharides*, *Mezereum* and *Arsenicum* deserve attention. (11.)

The more the bilious symptoms predominate, the more are *Mercurius*, *Colchicum* and *Pulsatilla* indicated. (11.)

The more the disease approaches the synovial variety, the more are *Stibium*, *Colchicum*, and *Kali-Hydriod.* and *Ledum* indicated.

In the muscular variety, *Mercurius* and *Bryonia* are most useful.

Belladonna and *Conium* are the most useful palliatives when the pains are much increased by motion. (11.)

It is but fair to add that I never let my patients, if I can help it, suffer with long-continued and intense pains, or with many sleepless nights; I consider the wear and tear upon the system thus produced, much more injurious than occasional small doses of *Morphine* will ever prove. Dr. Black admits, (*Ibid*, p. 240,) that as regards relief to articular pains, we must be prepared to be disappointed sometimes, under strictly homœopathic treatment; then we should certainly resort to palliatives, or some other mode of specific treatment. I regard *Opium* as a very valuable antiphlogistic remedy; I have repeatedly seen the most intense inflammations of the tonsils, pharynx and palate, subside under the use of one, two or three drop-doses of *Morphine*, repeated every two or three hours, with a rapidity and amount of comfort to the patient which was little short of very astonishing. *Rhus*, *Aconite*, *Belladonna*, or *Mercurius*, given in alternation, in rather larger doses than those in common use in the Homœopathic school, may have aided materially in this desirable result, but unaided by *Morphine*, I am very confident they do not act as well, for I have very often tried to do without the *Opium*; in fact I almost always commence the treatment of quinsy and other acute inflammatory affections of the throat without it, but in very many cases have been driven to its use on the second, third or fourth day, when the sufferings of the patient being constantly on the increase, I no longer felt myself justified in neglecting the use of means which I knew would prove so beneficial and comforting. (11.)

Dr. Black says that he has used nearly the same medicines as were employed by Drs. Wurmb and Caspar, but not in the 15th dilutions, as used by them, but in the lower potencies, and occasionally in the mother tincture, and rightly claims a much greater share of success than Drs. W. and C. I rarely or never use a dilution, but always from three or four to ten or twenty drops of the mother tincture, in a tumbler half or quite full of water, and give from a tea- to a table-spoonful per dose, in very severe cases, every one, two, four or more hours. (11.)

APOCYNUM-CANNABINUM.

INDIAN HEMP. (*American.*)

AUTHORITIES.

Wood and Bache. (7.) North-American Journal of Homœopathy. (67.) Peters. (11.) Marcy. (10.) E. P. Fowler. (60.) Gray. Snelling. (46.) King's Dispensatory. (100.) Watson of Utica. (27.)

GENERAL REMARKS.

In general appearance and character this species bears a strong resemblance to the preceding. The stems are herbaceous, erect, branching, of a brown color, and two or three feet in height; the leaves are opposite, ovate oblong, acute at both ends, and somewhat downy beneath; the cymes are paniculate, many-flowered, and pubescent; the corolla is small and greenish, with a tube not longer than the calyx, and with an erect border; the internal parts of the flowers are pinkish or purple. It grows in similar situations with the *A.-androsæmifolium*, and flowers about the same period. Like it, it abounds in a milky juice and has a tough fibrous bark, which by maceration affords a substitute for hemp. The root is the officinal portion.

The fresh root when wounded emits a milky juice, which concretes into a substance closely resembling caoutchouc. In the dried state it is brittle and readily pulverized, affording a powder like that of *Ipecacuanha*. According to Dr. Knapp it contains a bitter principle, extractive, tannin, gallic-acid, resin, wax, caoutchouc, secula, lignin, and a peculiar principle upon which its activity depends, and which he proposes to call *Apocynin*. (7. 46.)

It is said by the old authorities to be emetic and cathartic, sometimes diuretic, and like other emetic substances, promotes diaphoresis and expectoration. It produces much nausea, diminishes the frequency of the pulse, and appears to induce drowsiness independently of the exhaustion consequent upon vomiting.

The eclectic physicians regard it as emetic, cathartic, diaphoretic, diuretic, expectorant and tonic. "In many cases it acts both as an emetic and cathartic; it admirably supplies the place both of Tartar-emetic and Calomel, cleansing the stomach and bowels, and increasing the secretions of the liver, without the debilitating effect of the one, or danger of salivation from the other. In a full dose it occasions much nausea, diminishes the frequency of the pulse, and has a tendency to produce drowsiness, independent of the exhaustion consequent upon vomiting; copious vomiting soon ensues, and subsequently large and feculent stools. A general perspiration usually follows. (100.)

The decoction is said to be the most convenient form for administration. It may be prepared by boiling half an ounce of the *fresh root* in a pint and a half of water to a pint, of which from one to two fluid ounces may be given two or three times a day. (7.)

A fragmentary proving of the drug was made by Dr. J. C. Peters some time since, and published in the North-American Journal of Homœopathy, from which we extract it. He says: "being desirous of forming some idea of the action of Apocynum upon the healthy system I commenced taking half wine-glassful doses of Hunt's decoction, three times a day, sometimes immediately before breakfast, occasionally a few moments before dinner, but generally at the ordinary times for taking medicine, viz., morning, noon and night. For the first few days I noticed no perceptible effect from these doses, except an increased inclination towards constipation, and *decided scantiness of urine*; occasionally there was some flatulence, and slightly uneasy sensations in the bowels. About the fourth day, decided distention of the abdomen began to occur, especially after a moderate dinner—all the sense of fullness seemed about the stomach, liver and spleen, while the lower bowels did not appear more flatulent than usual. The sense of oppression about the epigastrium and chest, was several times so great, that there was the greatest difficulty in getting breath enough to smoke a cigar, or to speak with any comfort: and this happened after lighter meals than ordinary. I am confident that *my urine diminished to one-third the usual quantity*, but there was no pain or uneasiness about the kidneys or bladder: on the contrary these organs felt remarkably comfortable; they seemed simply torpid; the little water that was passed, flowed as easily as if it were oil, and there seemed to be but little expulsive power about the bladder. The urine was generally of a light golden sherry-yellow color, not depositing any sediment on exposure to cold. *This torpid action of the kidneys was rather peculiar*, as the weather was severely cold, and I was much exposed to it, and in my ordinary state my kidneys act frequently and rather freely. (11. 46.)

The bowels were sluggish, but the *feces* not hard or costive; the evacuations were exceedingly scanty, although occasionally it seemed as if diarrhœa would occur; but it did not even when a full wine-glassful was taken per dose. (11. 46.)

No perceptible influence was noticed upon the pulse. Occasionally a sense of sinking was experienced at the pit of the stomach, with a sense of general but transient debility.—Hard aching was felt several times in both knees, sufficiently severe to make me fear that an attack of inflammatory rheumatism was coming on. A very peculiar catarrhal attack was experienced, viz., without any other sign of having taken cold, I would wake up in the morning with the nostrils and throat filled with thick and well-concreted yellow mucus, as if I had had a severe catarrh for at least seven or ten days, and which had skipped its first stage and commenced in the second. (11. 46.)

I was once waked up early in the morning with severe irritation of the left eye, as if several sharp grains of sand were in it, attended with much heat, irritation and redness; after lasting several hours, this disappeared as suddenly as it came on, not leaving a trace behind, although the symptoms were severe enough to make me believe I had an attack of catarrhal rheumatic ophthalmia, which would last at least three or four days.

Once during the evening and twice upon different nights, I had sudden and violent attacks of hard and frequent coughing, annoying me for at least one or two hours, then disappearing without leaving a trace of cold behind.

The Apocynum was used to the extent of one pint of the decoction, taken in the course of six or seven days; on the days after ceasing the use of the drug, I had loose, but not very copious, bilious stools; and the urine became as abundant as in health." (11.)

Lately I made another experiment with Apocynum—Hunt's decoction; generally in wine-glassful doses, three or four times a day, occasionally two wine-glassesful were taken, even on an empty stomach, before breakfast. None of the above detailed effects were experienced except scanty discharge of urine; the bowels remained costive, and no nausea was produced. It has been suggested that the decoction was slightly soured, and that the Apocynin was thus destroyed. I took two full bottles in the course of one week, while in perfect health. It is right to add that during the first experiment I was growing very stout, and had just recovered from fever and ague, which may account for the oppression of the chest and flatulence; I am also often subject to protracted attacks of constipation. I have several times seen Apocynum administered in doses sufficient to remove extensive dropsical effusions, yet the bowels have remained obstinately costive and the stools light colored. (11.)

On three different occasions, we have taken repeated doses of the third dilution of Apocynum, but have experienced but few symptoms which we could fairly attribute to the drug. The last trial was made about two months ago, when we took for six days, five drops three times daily. No unusual sensations were observed until the fifth morning of the proving, when on waking, we felt a sinking at the stomach, dryness of the mouth, nausea, thirst, irresistible disposition to sigh, short and unsatisfactory respiration, short and dry cough, scanty expectoration of white mucus. These symptoms continued during the day, and on retiring we had in addition, unusual heat of skin, general restlessness, and desire to sleep without the ability to do so. During this entire day, urine was natural in quantity and appearance, and gave the same color to test-papers as in health. The night of the fifth was one of great restlessness and but little sleep. On the morning of the sixth day we awoke at about five o'clock, unrefreshed by our sleep, and with the same symptoms as on the fifth day, with the exception of a diminution in the quantity of urine.

During this day we were unable to detect any alteration in the composition of the urine, either by test-papers, or with acids.

The symptoms of the seventh day and night were a continuation of those of the sixth. On the eighth day the stomach and chest-symptoms had diminished, but the urinary secretion was increased in quantity and much lighter in color than in health. On the evening of the eighth day we experienced an unusual heaviness of the head, with dull aching pains in the small of the back and limbs. There was no tenderness in the region of the kidneys on pressure, but a slight soreness of the parts when bringing the muscles into action—thus indicating the muscles as the seat of the pains.

From the ninth-day, the symptoms continued very gradually to decline until the thirteenth day, after which no further abnormal phenomena were observed. (10.)

In diseases of those organs of the animal system, upon whose unre-mitted functions depends life, we are obliged to contend against more elements of difficulty than in diseases of the more passive portions of the system.

Added to the vitiated state common in disease to all tissues, we have constant reflex irritation (if we may use the expression,) arising from incessant attempts of the organ to perform its proper function, and the greater the restraint, the more vigorous is the endeavor for liberty, until at length it again assumes the command, or, on the other hand, is crushed, and life finding its tenement unfit for habitation, makes up its may-day of moving. The organ thus struggling for its natural rights may defeat itself in two ways:—first, it may induce organic changes of its structure, and secondly, it may, by undue quantity or improper quality of secretion or effusion, present an actual mechanical impediment; the first as exhibited in case of cardiac hypertrophy, consequent upon partial obliteration of the mitral valves of the heart or the semilunar valves of the aorta, and the second as in mechanical interference offered by hydropericardium.

To the *Apocynum-Cannabinum* as a remedy, I am, from considerable use and close observations of its action, inclined to think that we are rather indebted to its power of removing the mechanical embarrassment of dropsies than to its dynamically curative effects.

Its vocation, therefore, seems more analogous to a frontier-guard, protecting nature from external force whilst she is busy in restoring order within her state. I have administered the remedy in many dropsical cases of diverse radices, but I can recall no instance in which I can in honesty attribute the cure of the real malady to it, except indirectly so far as it served to remove mechanical opposition.

My memory distinctly reverts to three cases of hepatic cirrhosis, of which I made post-mortem examination, and one of which I made no post-mortem. They had each been given up to die, the longest lease of life granted by the doctors in any one of the cases, being about

two weeks. With the aid of the *Apocynum-Cannabinum* the shortest term of life among the four, after coming under my care was a little over two years, and the longest about five years.

The *Apocynum* drains the collections of water, which would of themselves, if left to accumulate, insure death, and that in as mechanical a mode as in case the heart's actions were stopped by an iron band.

If the disease is such that nature relieved from her contention with "outside pressure," can effect a recovery then the *Apocynum* may be an aid to real cure.

That it may be of use as a dynamically specific remedy I doubt not, but in connection with what diseases, I confess I have little or no knowledge, and this untrodden field is still open for exploration.

That as a rule it will remove dropsical accumulations is most true, when they occur from a disease of any organ, except the renal; but here it as a rule, will not do so, and simply I think, because it is not dynamically specific for the disease, but a mere exporter of the mechanical obstacle arising from the disease, and its great via-duct, the kidneys declare a blockade.

When the kidneys are diseased, but still sufficiently sound to permit a degree of heightened action, then the *Apocynum* may relieve until as the disease progresses they lose their capacity for stimulation, when it becomes of course impotent, and more hurtful.

The use of it in any case of renal disease can hardly, in my opinion, be deemed advisable, unless by necessity we must show the lesser of two evils, this being the lesser. For dropsies of every other portion of the animal body I consider it a most invaluable adjunct, not even omitting hydrocephalus.

At a future period, if deemed desirable, the writer may present a clinical report connected with the use of the *Apocynum-Cannabinum*.

W. P. FOWLER, M.D.

Kidneys.—Dull aching pain in the region of the kidneys, with increased secretion of straw-colored urine. (10.)

Clinical Remarks.—CASE 1. *In dropsy.* A gentleman, aged 70, six feet and two or three inches high, and splendidly proportioned, gradually became dropsical; the urine became scanty, bowels constipated, feet, legs and abdomen grew slowly larger, and gradually great difficulty of breathing from the slightest exertion or on lying down, ensued. From the thickness of the abdominal walls and the great quantity of fat in the omentum, fluctuation in the abdomen was long masked, but finally became very distinct; the thickness of the walls of the chest also rendered the physical signs of hydrothorax indistinct for a long time, but they finally became very manifest. The action of the heart became very feeble, but was always distinct; the pulse often vanished down to a mere thread: was often almost imperceptible for several beats: frequently so compressible that very slight pressure would obliterate it for the time; and altogether so strangely irregular, weak and intermitting, that the sudden death of

the patient was expected as a matter of course. These symptoms progressed steadily, in spite of the use of *Arsenicum*, *Helleborus-niger*, *Scilla*, *Digitalis*, *China*, &c., &c. He was finally put upon the use of Hunt's decoction of *Apocynum-Cannabinum*, at the suggestion of Dr. Gray, to whom the credit belongs of first introducing this important remedy into general practice; commencing with tea-spoonful doses every three or four hours. In less than forty-eight hours the patient was comparatively comfortable, was able to lie down and sleep with pleasure, whereas previously he had looked forward to the approaching night with the utmost dread and horror; the urine increased moderately and steadily, and in a few weeks the patient who had been ill for upwards of four months, was not only well, but felt better than he had for years. The bowels remained sluggish under the use of the hemp. This improved state of things lasted for more than a year, then a relapse was speedily cured by hemp; a third attack was cured by *Apis*; a fourth by *Digitalis*, *Squills* and *Mercurius*, and a fifth by *Hydriodate of Potash*. During the larger portion of this time the patient had contracted and encouraged a most invincible dislike to the *Apocynum*, and could not be persuaded to take it longer than would barely suffice to mitigate his most urgent symptoms. A sixth attack from which he is now apparently recovering, withstood all the above remedies, with the exception of the *Apocynum*: this he was finally persuaded to take, when his condition was almost hopeless and distressing in the extreme, from excessive oppression and difficulty of breathing, inability to sleep or lie down, excessive distension of the limbs and abdomen; hydrothorax and œdema of the lungs; inability to walk or step without being thrown into the most violent suffocative attacks, and in short, from the numerous and complicated symptoms of general anasarca, ascites, hydrothorax, hydropericardium, and œdema of the lungs. After using the *Apocynum* three or four days, in doses of one-third of a wine-glassful three times a day, the urine increased from less than a pint in twenty-four hours to fully three quarts, with a progressive diminution of all the symptoms. This case has since died, without any return of dropsy. (11.)

CASE 2. A man, aged 32, had suffered with anasarca, ascites and commencing hydrothorax for many weeks, under active allopathic treatment by means of Cream of Tartar and *Digitalis*, *Elaterium*, &c. When I first saw him, his largest pantaloons would not meet by upwards of five inches; the legs of his pantaloons had to be cut open and tied with strings, to accommodate his elephantine limbs; he was utterly unable to lie down or to sleep; urine excessively scanty and bowels costive. The *Apocynum* was commenced in table-spoonful doses, gradually increased to a wine-glassful every four hours, by night and day; this was continued for upwards of ten days without any unpleasant symptoms; the urine slowly commenced to increase, and finally became enormous in amount. In less than a month he

was entirely well; was soon able to go to sea, and remains well until this day, upwards of two years after, as I have lately heard from his family. (11.)

CASE 3. A gentleman, aged 67, had gradually been becoming dropsical for eleven months: he had first been treated homœopathically in the country, by an exceedingly able, but excessively high-dilutionist homœopathist; he then fell into the hands of two of the most distinguished allopathic professors of this city; then he was again treated with high dilutions for several weeks, by one of our oldest and best known homœopathists; finally, he came into my hands and was immediately put under the use of *Apocynum*; one dessert-spoonful per dose every four hours; his urine, which had been excessively scanty for months, and finally had decreased to a small half pint in twenty-four hours, thick, yellow and turbid, as if yellow clay had been dissolved in it, increased to upwards of two quarts in one night; two large chamber-potsful were passed in one day; in less than forty-eight hours after commencing the *Apocynum*; the urine also became clear and of a light straw-yellow color; all the signs of anasarca, ascites, hydrothorax, and œdema of the lungs disappeared in less than ten days, after using about one pint of Hunt's preparation of *Apocynum*. This patient has since died of dropsy. (11.)

CASE 4. A gentleman, aged about fifty years, was attacked with inflammatory rheumatism, and treated by an eminent old-school physician of this city for about eight weeks, when he became discouraged, from the severity of his sufferings, and placed himself under our care. He had taken the usual routine medicines of the other school, like *Colchicum*, *Mercury*, *Hydrate of Potash*, *Opium*, &c., and when he came into my hands, was reduced by the combined influence of the disease and the drugs, to the following pitiable condition. Severe rheumatic pains in the back, shoulders, elbows, and wrist-joints, dull pains and great stiffness and immobility in the lower extremities, œdematous condition of both legs, effusion of water in the chest and abdomen, excessive dyspnœa with constant sense of suffocation, acute pains in the cardiac region at every respiration, pulse rapid, feeble and very irregular, almost entire suppression of urine, dry and hot skin, thirst, dull headache, excessive anxiety and constant dread of suffocation, inability to assume the recumbent posture, dryness of the tongue and mouth, inability to sleep from constant feeling of suffocation, short, dry and painful cough. For this group of symptoms we prescribed the first dilution of *Bryonia* every hour. After a few hours the rheumatic and cardiac pains were ameliorated, and the oppression of the chest and difficulty of breathing were somewhat better. At the expiration of about ten hours we prescribed *Aconite* (first dilution), in alternation with *Bryonia* every hour. During the night, some ten hours after the first dose of *Aconite*, the patient had profuse perspiration for several hours, followed by an amendment of the entire condition. These two remedies were now continued at intervals of four

hours for two days longer, but without causing any farther improvement. The first dilution of Apis was next ordered in drop-doses every two hours. This was continued for three days, without any notable improvement. The patient was now ordered to take a tea-spoonful of Hunt's Apocynum every two hours. In a few hours the urinary secretion was much increased, and it continued for several days, until the dropsical effusions and the œdematous condition of the limbs, had entirely disappeared. While under the use of Apocynum, occasional scarifications were made upon the legs and feet, giving exit to much serum. As the dropsical effusions diminished, nearly all of the symptoms first enumerated gradually disappeared, until finally the patient complained only of debility, and occasional paroxysms of palpitation of the heart—the remains of the rheumatic disorder.

After a few weeks the patient returned to his home in the west, remained in a comfortable condition for several months, was again attacked with dropsy, and after an illness of about two months died. This case was seen by Dr. Peters and Ball, who concurred in the propriety of placing the gentleman under the use of Apocynum. (10.)

CASE 5. A case of hydrothorax, in a chlorotic girl of sixteen years, was cured in three weeks, with dessert-spoonful doses of Hunt's Apocynum, taken every three hours. (10.)

We have administered this medicine in several instances of dropsies depending on enlargement, and valvular diseases of the heart, without the slightest beneficial result. Also in dropsical effusions, resulting from fatty degeneration and Bright's disease of the kidneys, we have now and then given it, but with only temporary and quite limited benefit. (10.)

Apocynum is utterly useless in Bright's disease, except to remove the dropsy. I ought to add that albuminuria was present in none of the above cases. It is also comparatively useless when inflammation is present. When pneumonia or pleurisy exist in conjunction with dropsy, the Apocynum will fail, unless assisted with other remedies. I commenced the use of the Hemp in the first case in which I gave it with great reluctance; I had always regarded it as a most potent and dangerous remedy; my prejudices against the large doses which seemed to be required were greater than many will suppose. I had witnessed bad effects from it in the hands of others in appropriate cases, and knew that the decoction of the dried root often failed in hospital practice. (11.)

Dr. Watson of Utica says: I have seen it very effectual in ascites in the hands of Dr. Okie of Providence, and have seen it remove the dropsical accumulation in Bright's disease, but never knew it cure this disease.

Female Sexual Organs,—*Menorrhagia*. Dr. Marsden of York-Spring, Pa., thus relates his experience with the remedy. "For several years past I have been in the habit of using the Apocynum in arresting menorrhagia, as well as some other forms of uterine hæ-

morrhage. On the 14th July, 1853, I was called upon by a farmer who resides two miles distant, stating that his wife was then laboring under the most alarming uterine hæmorrhage. It was her regular catamenial period; the flow had been moderate for a day or two, and then suddenly set in with so much violence, that she soon became too weak to be out of bed. She was still young, probably twenty-four or twenty-five years of age; the mother of three children, of German extraction, having black hair and eyes, with rather fair complexion. I had, I believe, previously attended her in two labors, in the latter of which profuse hæmorrhage occurred prior to delivery, which was speedily arrested by rupturing the membranes.

When I arrived at her bedside she was almost pulseless, and disposed to faint, whenever she attempted to raise her head from the pillow. There was great irritability of the stomach, and vomiting. The hæmorrhage which ceased at intervals, always recurred when the vital powers rallied, and the heart resumed in some degree its wonted action. The blood was usually expelled in large clots, but sometimes as I understood, flowed in a more fluid form. I gave her successively for two or three days, several of the remedies which I considered indicated, but with no better result than mere temporary cessation of the hæmorrhage, which probably would have taken place had I given no medicine at all. She seemed still to grow weaker, until despairing of my ability to cure her, her husband called on me to say that he intended resorting to some domestic remedy which a meddling neighbor had very confidently advised. Upon his return home, however, the patient learning his intention, refused her consent, and desired me to be sent for again. I had by this time exhausted the catalogue of remedies laid down in the books, and as I was renewedly appealed to by the patient to save her life, I could not conscientiously resort again to measures which I had already found useless in her case. I immediately prepared a tincture of the *Apocynum-Cannabinum*, by bruising some of the fresh root, pouring upon it a little alcohol, and expressing the resulting fluid. Hastening again to the bed-side of my patient, I found the hæmorrhage still going on, undiminished. I prescribed one drop of my tincture, (of uncertain strength) to be taken in water every hour. Almost immediately after commencing this medicine the flow became less profuse, and regularly and rapidly declined, without a single recurrence of its violence.

MARSDEN.

CASE 2.—This case occurred in the early part of the year 1854. The patient was a housekeeper, probably about forty years of age, accustomed to hard service, and but little careful of her health. She was unmarried, but the mother of one child, which had been born about fifteen years before. I first visited her on the 16th of February. She told me she had been suffering from the most exhausting menorrhagia for about six weeks, and had been taking medicine from an intelligent apothecary, and subsequently from one of our oldest allopathic physicians, but without benefit. I found her greatly debilitated,

pulse feeble and quick, palpitations very troublesome whenever she attempted to move about the house, stomach excessively irritable. She had been obliged to leave off her occupations, and passed her time for the most part in bed, or seated upon a chair at a little distance, which she could now with difficulty reach when she arose. The discharge was fluid, and still undiminished. I left *Apocynum-Cannabinum*, to be taken in drop-doses at an interval of two hours; the medicine was part of the same tincture I had prepared for treating the foregoing case. I was sent for upon the following day, on account of the patient having suffered from distressing vomiting, at intervals, since seen the day before. Her stomach was too irritable to bear the dose I had prescribed, and which was probably unnecessarily large. The discharge seemed, however, to be somewhat diminished. After the interposition of some remedies calculated to allay the distressing irritability of the stomach, I again prescribed *Apocyn.-Cann.*, a few drops in a tea-cupful of water, to be taken as before. I believe I reduced the strength more than once, before the remedy could be borne without creating nausea. The flow, however, still continued to diminish, and in about a week from the time of my first visit, was reported as having *nearly* ceased. It was, of course, some time before the patient regained her strength. I believe upon inquiry made some months afterwards, I was informed that at one or two periods immediately subsequent, the flow was somewhat above the normal amount, but soon subsided spontaneously, and that she was then "as regular as is usual at her time of life."

MARSDEN.

CASE 3.—This patient was the wife of a farmer, was about forty years of age, the mother of several children, of dark complexion, dark eyes and black hair, and what is called in the country a "hard worker." Her regular catamenial period had occurred about four and a half weeks before the date at which I saw her, and the discharge had continued uninterrupted until that time. The patient was in bed, very feeble, with quick pulse, and complained of weakness of the limbs, and palpitation of the heart. She said she had been exposed to intense cold, riding with her husband in a sleigh, three or four days after the flow set in. It was at the time I saw her, according to her own report, undiminished. Prescribed *Apocyn.-Cann.*, 1st decimal trituration of the bark of the root, three or four grains in half a common-sized tumbler of water, a tea-spoonful to be taken every two hours during the day, but to be discontinued at bed time, until the next morning. Enjoined rest in the recumbent position. I called at the door of the patient's house, without dismounting, on the morning of the second day, and inquired for her. The person to whom I spoke first, went in and conversed with the patient, and returning reported her better. I again saw her four days later, when I found her engaged in domestic duties, I thought prematurely. I did not ask when she had resumed her occupations, but I inferred from known circumstances, it had been before that day. She reported herself as "pretty nearly right," but said she still felt the palpitations when she moved

actively about. I then inquired how soon she began to get better. She said she did not notice much difference the day next after my first visit, but on the day following *that*, she found herself much better, and had continued thenceforward regularly to improve.

In the intervals of the cases which I have just described, I treated many others with the same remedy alone, (except Cinchona, where excessive debility remained,) and with almost uniform success. The hæmorrhage which showed no signs of decline at the time the treatment was commenced, very generally soon began to diminish, and so rapidly subsided, as in my opinion fully to justify the conclusion that the result was influenced by the medicine. In one case, the hæmorrhage was, I remember, greatly increased for a few hours, but afterwards rapidly declined and soon entirely ceased. MARSDEN.

I remember but two cases where the Apocynum failed. One of these I did not see—it was related to me by the husband, and he it was who afterwards told me the medicine had done no good. The woman was reckless in her habits, and very regardless of hygienic regulations, and a determined unbeliever in homœopathy. She at a subsequent period died of uterine hæmorrhage, under the treatment of an allopathic physician. The other case was one of hæmorrhage during pregnancy. I prescribed for it when visiting a relative of the patient. Upon inquiry of this relative some months afterwards, I was informed that no beneficial result had followed the treatment. In another case, however, similar to this, and which I kept under my own eye, the Apocynum seemed to be of service. This lady in the early stage of a former pregnancy, had become subject to hæmorrhage, slight at first, but recurring at intervals with increased violence, until about the third month it terminated in abortion. I was called upon to attend her immediately after this accident, when I found her flooding profusely. Apocynum was prescribed in repeated doses, the only occasion in which I remember to have used it in a similar case. The hæmorrhage speedily diminished, and soon ceased entirely. She shortly again became pregnant, and occasional discharges of blood set in as before. I gave her Apocynum, to be taken at each recurrence of this symptom, until it should disappear, and a few doses of Sabina, about the time corresponding to that of the catamenial period. Not long afterwards she informed me that all was right—gestation now proceeded to full term, when she gave birth to a remarkably well-developed, healthy male child, and without any flooding, although she obstinately persisted in a determination to be delivered out of bed upon her knees.

The preparation I have most frequently used is the first decimal trituration of the bark of the root. Of this I put three or four grains into a half tumbler of water, and direct a tea-spoonful to be taken every hour, two hours, or at longer intervals, according to the urgency of the symptoms.

I may perhaps, be allowed here to state a fact, which although lying beyond the scope of the present article, may be found of sufficient im-

portance to justify such digression. It is this: in preparing this trituration I always experienced a *violent irritation of the schneiderian membrane*, more approaching that occurring in a severe attack of coryza, or common cold in the head, than any I remember to have felt from any active medicinal agent. Accordingly I have used the Apocynum in that affection upon myself, and as I have thought, with considerable benefit. MARSDEN.

This remedy deserves a more complete proving than it has yet been subjected to.

AQUILEGIA VULGARIS.

COLUMBINE.

AUTHORITIES.

Wood and Bache. (7.) W. H. Watson, of Utica. (54.) Snelling. (46.) Peters. (11.)

GENERAL REMARKS.

A perennial, herbaceous plant, indigenous in Europe, but cultivated in our gardens as an ornamental flower. All parts of it have been medicinally employed. The roots, leaves and flowers have a disagreeable odor, and a bitterish, acrid taste. The seeds are small, black, shining, inodorous, and of an oleaginous sweetish taste, followed by a sense of acrimony.

Columbine has been considered diaphoretic, diuretic, and anti-scorbutic, and has been employed in jaundice, in small-pox to promote the eruption, in scurvy, and externally as a vulnerary.

It is not used at present, and is even suspected to possess dangerous properties, like most other plants of the natural order of Ranunculaceæ. (7. 46.)

HOMŒOPATHIC APPLICATIONS.

Peters, Diseases of Females, p. 85, says that it is beneficial in many uterine affections, especially when the menses, although regular as to time, are too scanty, and attended with a dull, painful, nightly increasing pressure in the right lumbar region. (54.)

It is an active remedy, and deserves a careful proving. (11.)

ARALIA HISPIDA.

DWARF ELDER. WILD ELDER. BRITTLE STEM.

AUTHORITIES.

Wood and Bache. (7.) King's Dispensatory. (56.) W. H. Watson, of Utica. (54.)

EMPIRICAL OPINIONS.

The eclectic physicians regard it as sudorific, diuretic, and alterative. Very useful in diseases of urinary organs, particularly dropsy and gravel.

Dr. Peck, of Massachusetts, strongly recommends it in the former of these diseases. He uses it in the form of decoction, and finds it pleasanter to the taste and more acceptable to the stomach than most medicines of this class. (56.)

It deserves attention when Apocynum, Apis, &c., fail in dropsy. (11.)

ARALIA NUDICAULIS.

FALSE SARSAPARILLA.

AUTHORITIES.

Wood and Bache. (7.) Snelling. (46.) W. H. Watson, of Utica. (54.)

This plant is the *False Sarsaparilla*, *Wild Sarsaparilla*, or *Small Spikenard*, and is an indigenous perennial. The root is the portion used.

It is said to be a gentle stimulant, alterative and diuretic, and is thought to exert an alterative influence over the system, similar to that of the true Sarsaparilla. It is used in domestic practice and by some practitioners in the country as a remedy in rheumatic, syphilitic, and cutaneous affections, in the same manner and dose as the genuine Sarsaparilla. A strong decoction is said to have proved useful as a stimulant to old ulcers. (7. 46.)

Externally, a strong decoction of it is useful as an application to herpes-zoster, or zona, sometimes called shingles, and also as a stimulant wash to old ulcers. It has also some repute in pulmonary affections. (54.)

The root of the *ARALIA-RACEMOSA*, or *American Spikenard*, is often used for the same purpose as the *Aralia-Nudicaulis*, which it is said to resemble in medicinal properties.

ARALIA-SPINOSA.

ANGELICA-TREE BARK.

AUTHORITIES.

Wood and Bache. (7.) Snelling. (46.) W. H. Watson, of Utica. (54.)

This is an indigenous, arborescent shrub, variously called *Angelica-Tree*, *Toothache-Tree*, and *Prickly-Ash*. The last name, however,

should be dropped, as it belongs properly to the *Xanthoxylum-Fraxineum*, and if retained might lead to confusion. This species of *Aralia* is found chiefly in the Southern and Western States, though cultivated in the gardens of the North as an ornamental plant. It flourishes in low, fertile woods, and flowers in August and September. The bark, root, and berries are medicinal. The bark is thin, greyish externally, yellowish within, of an odor somewhat aromatic, and a bitterish, acrid, pungent taste. It yields its virtues to boiling water.

It is said to act as a stimulant diaphoretic. According to Elliott, an infusion of the recent bark of the root is emetic and cathartic. It is used in chronic rheumatism and cutaneous eruptions, and in some parts of the South has been employed in syphilis. Pursh states that a vinous or spirituous infusion of the berries is remarkable for relieving rheumatic pains; and a similar tincture is said to be used in Virginia in violent colic. The pungency of the tincture has also been found useful in relieving toothache. (7. 46.)

During the cholera of 1849-50, it was used in Cincinnati by the so-called eclectic physicians, in cases where they considered cathartics useful, but found the action of other purgatives difficult to control. It is a powerful sialogogue, and a very small portion of the powder will produce moisture and *relieve difficulty of breathing, where the mouth and throat are parched*. Has been found useful in sore-throat. (54.)

In dryness of the mouth and tongue, such as occurs in typhoid fever, &c., I have always looked upon Chlorate of Potash as the most useful remedy; it is surprising how quickly it will render a dry and hard brown tongue, moist. (11.)

ARCTIUM-LAPPA.

BURDOCK.

AUTHORITIES.

Wood and Bache. (7.) Snelling. (46.)

Burdock is a biennial plant, with a simple, spindle-shaped root, a foot or more in length, brown externally, white and spongy within, furnished with thread-like fibres, and having withered scales near the summit. The stem is succulent, pubescent, branching, and three or four feet in height, bearing very large cordate, denticulate leaves, which are green on their upper surface, whitish and downy on the under, and stand on long foot-stalks.

It is a native of Europe, but is abundant in the United States, where it grows along the road-sides, among rubbish, and in cultivated grounds. Pursh thinks it was introduced.

It is considered by the opposite authorities to be aperient and diaphoretic, and sudorific, without irritating properties, and has been recommended in gouty, scorbutic, venereal, rheumatic, scrofulous, lep-

rous, and nephritic affections. To prove effectual, they say it must be persevered in for a long time. The leaves have also been employed externally and internally in cutaneous eruptions and ulcerations. (7. 46.)

ARGEMONE-MEXICANA.

PRICKLY POPPPY.

AUTHORITIES.

Wood and Bache. (7.) Watson. (54.)

An annual plant, belonging to the Papaveraceæ, growing in the Southern and Western States, Mexico, the West Indies, Brazil, and in many parts also of Africa and Southern Asia. It has an erect, somewhat glaucous, bristly stem, with alternate sessile leaves, sinuated and prickly at the angles, and usually marked with white spots. The flowers are solitary, yellow or white, with two or three prickly deciduous sepals, four or six large petals, about twenty stamens, and four or six reflexed stigmas. The whole plant abounds in a milky, viscid juice, which becomes yellow on exposure to the air. From the statements of different authors, it may be inferred that the plant is emetic and purgative, and possesses also narcotic properties. The juice, which is acrid, has been used internally in obstinate cutaneous eruptions, and as a local application to warts and chancres, and in diseases of the eye. The flowers are stated by De Candolle to have been employed as a soporific. The seeds, however, are most esteemed. They are small, round, black, and roughish. In doses of two drachms, infused in a pint of water, they are said to act as an emetic. In smaller doses they are purgative. An oil may be obtained from them by expression, which has the cathartic properties of the seeds. (7. 54.)

ARGENTUM-CHLORATUM.

CHLORIDE OF SILVER.

AUTHORITIES.

Wood and Bache. (7.) Dunglison's New Rem. (16.) Snelling. (46.)

GENERAL REMARKS.

Chloride of silver is prepared by the decomposition of a solution of nitrate of silver by an excess of a solution of chloride of sodium. It appears as a precipitate. Prepared in this way it is of a white color, devoid of taste, and not soluble in water, but soluble in ammonia. In the light it speedily changes, especially when much divided, or when moist; and sometimes assumes a dark violet hue, as the chlorine is given off. It suffers no decomposition when

united with vegetable matters. It must be dried and kept protected from the light. (16. 46.)

It is considered as almost certain, that in administering the nitrate of silver, in consequence of the presence of chloride of sodium, the phosphates, &c., in the food and in the secretions, it resolves itself into the chloride, phosphate or albuminate of silver; compounds far less energetic than the original salt. The experiments of Keller, who analyzed the fæces under the use of this drug, confirm this view. Such being the inevitable result when the nitrate is given, the question arises how far it would be expedient to anticipate the change, and give the silver as a chloride ready formed. (16. 46.)

It is readily prepared by adding a solution of common salt to one of nitrate of silver as long as it produces a precipitate. As first thrown down it is a white curdy substance, but it soon becomes discolored when exposed to the light. It has been used, rubbed on the tongue in syphilis, and internally in epilepsy, chronic dysentery and diarrhœa, and other diseases in which the nitrate of silver has been given. Dr. Perry administered it at the Philadelphia Hospital, Blockley, in chronic dysentery with the immediate effect of diminishing the number of stools. The crystallized *Ammonio-chloride of silver* has been given in syphilitic affections in doses of the fourteenth of a grain. (16. 46.)

In syphilis. M. Serre describes several cases of syphilis in which the preparations of silver were administered. The first patient was a soldier, thirty-six years of age, of athletic constitution, who at the time of his admission had several extensive chancres on the prepuce, so close to each other, as almost to form one large continuous sore, four or five lines in diameter. After a few days' rest, and the use of baths, M. Serre ordered the chloride of silver in frictions on the tongue in the quantity of one-twelfth of a grain. The ulcers were treated with simple cerate. After the second rubbing the patient experienced violent colicky pains, which were not severe enough, however, to induce a discontinuance of the remedy. Scarcely had a grain of the chloride been employed, when the secretion from the ulcerated parts became less; the surface of the chancres lost the kind of greyish border which they possessed, and cicatrization proceeded rapidly. The frictions were continued, and the condition of the patient went on improving. At the end of two months, he left the hospital. In the five subsequent cases the same plan of treatment was pursued. The chloride was used exclusively, according to the iatroleptic method. The symptoms were various; in addition to chancres, there was in one case a suppurating bubo; in another syphilitic vegetations at the margin of the anus; and in a third fissures in the same part. In the seventh case in which there were chancres, gonorrhœa, and extensive rugous blotches on the nates, the chloride of silver was rubbed on the tongue, and applied topically in the form of ointment. The eighth patient who suffered with large condylomata,

as well as with ulcers in the neck, took the chloride in pills to the extent of nine grains in the course of treatment; frictions with the ointment of silver were also applied to the affected parts. (16.)

In nervous affections. Dr. Perry as was stated above has administered it with great advantage in epilepsy, chronic dysentery, chronic diarrhœa, and other affections in which nitrate of silver is prescribed internally. Twelve grains given daily for three months produced no unpleasant symptoms; and in no case did discoloration of the skin succeed. In epilepsy three grains, given four or five times a day produced effects similar to those of nitrate of silver, but more marked.

In chronic dysentery, half a grain to three grains, taken three times a day, produced immediate diminution in the number of the evacuations, and relieved the tormina; inducing at the same time an improvement in the character of the stools and other symptoms. Similar testimony is afforded by Kopp, and Dr. Dunglison states that he has very frequently prescribed the chloride, and on the whole it has appeared to him to be equal to the nitrate in the class of cases mentioned by Perry. (16. 46.)

ARGENTUM-CYANURETUM.

CYANURET OF SILVER.

AUTHORITIES.

Wood and Bache. (7.) Dunglison. (16.) Snelling. (46.)

GENERAL REMARKS.

This is a preparation of nitrate of silver, ferro-cyanuret of potassium, sulphuric-acid and distilled water. It is of a white color, devoid of taste, not soluble in water, but soluble in ammonia. Like chloride of silver when exposed to the air, its surface becomes of a dark-violet hue. It is dry and should be kept preserved from the light. It experiences no decomposition when mixed with vegetable matters. (16. 46.)

From experiments made by Dr. Letheby, he concluded that it is a local irritant, producing great vomiting and a congested state of the vessels of the stomach—that when it has been dried before its introduction into the system no other ill-effects follow, but if it be administered in a moist state, it is then capable of being absorbed, and perhaps decomposed; for an albuminous solution has the property of dissolving the cyanide, and, moreover, the contact of it with any of the chlorides of the systemic fluids would produce a double decomposition, and the formation of a soluble cyanide, whose effects would be similar to that of cyanide of potassium. (16. 46.)

The dose capable of killing a dog is five grains; its specific action appeared to Dr. Letheby to be upon the brain, producing occasional

convulsions, always coma, paralysis, a peculiar sighing respiration, a fluttering, irregular and tumultuous action of the heart, and it ultimately kills by a gradual exhaustion of the involuntary acts, death taking place in from one to three hours after its administration. (16. 46.)

ARGENTUM-IODATUM.

IODIDE OF SILVER.

AUTHORITIES.

Dunglison. (16.) Snelling. (46.)

GENERAL REMARKS.

Iodide of silver is obtained by mixing a solution of nitrate of silver with one of iodide of potassium. The yellowish flakes, produced by the admixture of the two fluids, are then washed several times with distilled water, and dried in an oven.

Iodide of silver is of a pale-yellow color, but becomes under the action of light and air of a deeper yellow. It has no taste, and is neither soluble in water nor ammonia. The latter property serves to distinguish it from the chloride or any cyanuret of the same metal. Like the chloride, the iodide should be kept in a dry dark place. (16. 46.)

We have already indicated its therapeutic powers under the head of *Argentum*. It was one of the remedies successfully used by Serre, in his experiments on cases of syphilis, and is detailed at length under the head named. (46.)

It is supposed to possess the general properties of nitrate of silver, but may be used without the danger there is in administering that drug of discoloring the skin. Dr. Patterson found it generally successful in curing the affections of the stomach of the Irish peasantry, in the treatment of which nitrate of silver had previously been found successful. He also succeeded in curing several cases of whooping-cough with it, and in a very short time—and a case of dysmenorrhœa of very long standing was also much relieved. Its effects in epilepsy were less satisfactory. (16. 46.)

ARGENTUM-MURIATICUM-AMMONIATUM.

(*Argenti et Ammoniæ-Chloridum.*)

CHLORIDE OF SILVER AND AMMONIA.

AUTHORITIES.

Dunglison's New Rem. (16.) Snelling. (46.)

GENERAL REMARKS.

This preparation is obtained by saturating by the aid of heat, liquid ammonia, with freshly precipitated, and carefully-washed chloride

of silver. The Chloride of silver and Ammonia has a bluish-white color, the peculiar smell of Ammonia and a burning almost caustic taste. In the air it gradually exhales Ammonia, and acquires all the properties of simple Chloride of silver without, however, losing its form of original composition. If the crystals be kept in the Ammonia in which they were formed, they do not undergo the slightest change in their color from the effect of light. (16. 46.)

This remedy is one of those employed with advantage by Serre in syphilis. Another preparation, the *Liquor-argenti-muriatici-ammoniati*, has long been recommended by Kopp, in cases of chronic nervous affections. He found it of great efficacy in St. Vitus-dance. (46.)

ARGENTUM-METALLICUM.

METALLIC-SILVER.

AUTHORITIES.

Dierbach's Mat. Med. (6.) Vogt's Mat. Med. (20.) Jahr and Possart. (32.) Teste, Mat. Med. (36.) Pereira's Mat. Med. (3.) Laurie. (69.) Hahnemann. (1.) Füllgraff. (26.) Peters. (11.)

GENERAL REMARKS.

According to Dierbach, in olden times, the heavenly bodies, viz., the sun, moon and stars were supposed to exert peculiar influences over certain parts of the body: thus the sun was supposed to affect the heart, and the moon the brain. A connection between the metals and the planets was also universally believed in, and even the same names were given them, thus gold, corresponding to the sun, was called *sol*, and used in diseases of the heart, while silver, corresponding to the moon, was called *luna*, and used in diseases of the brain, and especially in epilepsy, which was regarded as so completely under the influence of the moon that it was formerly called *morbus lunaticus*. Basil Valentine even went so far as to think that cold dropsies were produced by the influence of the cold moon, and hence also included them in the class of *lunatic* diseases curable by silver, although Dierbach tells us, that silver has been repeatedly observed to have caused fatal dropsy when given against epilepsy: Vogt also says that it has caused cachexia, emaciation and dropsy, although he too tells us that it was used in olden times in dropsy, ulcerous cachexia and other obstinate diseases of the vegetative system. G. A. Richter says, in some instances, when given against epilepsy, the original disease has been supplanted by a fatal dropsy, complicated with induration of the liver. From the experiments of the homœopathists, we find no proof that it is homœopathic to dropsy, except that it has caused a painless, slightly reddened swelling of the wrist and lower-half of the fore-arm. Vogt says it was once regarded as diuretic, but

that latterly we hear little or nothing of this effect; but in the experiments upon the healthy the metallic silver causes frequent urging to urinate and more profuse flow of urine; while the nitrate is said to have caused violent irritation of the urinary organs, increased secretion and involuntary discharge of urine. Noack regards this effect as so marked that he has recommended it in diabetes; hence it may prove homœopathic to dropsy with increased flow of urine. (11.)

LOCAL EFFECTS.

According to Dr. Huber, metallic silver acts principally upon the following parts:

1. THE ARTICULATIONS. The action of silver upon the articulations is so uniformly the same, and so certain, that but few remedies equal it in this respect.

Clinical Remarks.—Noack and Trinks recommended it in coxalgia, but especially in certain affections of the elbow and knee; in rheumatic and arthritic affections of the joints. Huber advised it in arthritis-articularis, arthralgia, arthritis, coxalgia, omagra and gonagra.

2. THE BONES, especially the long bones, and upon the cartilages, particularly the cartilaginous surfaces of the ears, eustachian tube, tarsal cartilages, cartilages of the nose, false ribs, &c.

Clinical Remarks.—Noack and Trinks recommend it in mercurial cachexia, and Huber in congestive and inflammatory affections of the bones and cartilages, and of their membranes, such as the periosteum and synovial membranes; in ostalgia, ostitis, periostitis, perichondritis, &c. But it is very doubtful whether it is as useful as Meze-reum, Kali-hydriod., &c. (11.)

3. THE MUSCLES, tendons and ligaments, especially those which are in the neighborhood of joints, also upon the psoas, triceps brachialis, &c.

Clinical Remarks.—It seems to act specifically upon many of the fibrous tissues; Huber recommends it in psoitis. Doubtless in acute inflammatory attacks it will have to be preceded by Aconite, Bryonia, Colchicum, Stibium, &c. (11.)

4. Upon certain GLANDULAR ORGANS, such as the salivary glands and testicles.

Clinical Remarks.—Huber recommends it in inflammation of the salivary glands; also in orchitis, nocturnal emissions, diminution of the sexual instinct and other affections of the testicles. (11.)

5. Upon THE HEART. Huber recommends it in spasm of the heart, and Noack in some heart-affections.

Mind and Disposition.—Increased cheerfulness and disposition to talk the whole day, (reaction), discouraged. (19.) Anxiousness. Lowness of spirits and indisposition to talk. (32. 54.) Vertigo with obscuration of sight.

Clinical Remarks.—Silver may act somewhat similar to Aurum in producing marked cheerfulness and even hilarity. (11.)

Sleep.—Restless night, full of dreams about disgusting objects. (21.)

Clinical Remarks.—It has been recommended against sleeplessness, especially when the sleep is disturbed by jerks and starts in the muscles. (11.)

Head.—Vertigo. Pressure and tearing pain in the region of the right and left temporal bone, increased by contact. Giddiness and stupefaction of the head. Spasmodic jerking of the right temporal muscle, the occipito-frontalis muscle, also the muscles of the side of the neck, and cervical region. (32.)

Clinical Remarks.—It may prove homœopathic to some of the head-affections which attend epilepsy; at least Huber noticed complete dizziness on entering a room after a walk; while slumbering he was seized with dizziness, so that it seemed as if his head was falling out of bed; also while dozing in the afternoon, a violent electric shock which proceeded first from the left, then from the right hip, disturbing his sleep; another shock more violent, was afterwards felt in the left arm. (11.)

Eyes.—Violent itching in the corner of the eyes. (19.)

Nose.—Violent bleeding at the nose, on blowing the same, returning again three hours later. (19.) Fluent coryza, with constant and profuse secretion of mucus; excessive fluent coryza. Beating in the left nostril as if the muscles were raised from off the mucous membrane. (32.)

Face.—Drawing pain in the muscles of the face. Painful, gnawing pressure in right malar bone. Tearing in the region of the left malar bone. (19.)

Ears.—Cutting stitches in internal ear, extending to the brain. Cutting pain in the Eustachian tube. Feeling of obstruction in the ear. (19.) Titillation in the throat in the region of the orifice of the right Eustachian tube, extending to the internal ear; very soon afterwards the same was experienced on the left side. (21.)

Jaws and Teeth.—Toothache as if the teeth were loose. The gums are painful when touched. Loose, readily bleeding gums. (32.)

Mouth, Pharynx, &c. Dryness of the tongue and buccal cavity; the tongue adhered to the palate. (21.) Vesicles on the tongue, sore and burning. (32.) Pains in the parotid gland, and swelling of the submaxillary glands with stiffness of the neck, and difficulty of swallowing as if there were internal swelling of the throat, so that he is obliged to force every mouthful down his throat. Viscid saliva in mouth; viscid, grey-jelly-like mucus in the throat, which can be easily hawked up in the morning.

Clinical Remarks.—Huber had always been very subject to slight attacks of tonsillitis, which ceased entirely while he was experimenting with silver. It promises to be useful in some cases of chronic pharyngitis, probably of the follicular kind. (11.)

Appetite.—Aversion to every kind of food, even when merely thinking of it, one is speedily satiated. A good deal of appetite, even

when the stomach is full. Gnawing hunger, not removed by eating. (32.)

Clinical Remarks.—It tends to increase the appetite, and may also increase the secretion of gastric juice.

GASTRIC SYMPTOMS.—**Stomach.**—Heartburn. Constant nausea and qualmishness. Gaggling-up of an acrid, badly-tasting fluid, followed by scraping and burning in the fauces. Pressure in the pit of the stomach. Painfully oppressive distention of the abdomen. Cutting in the abdomen. Loud rumbling in abdomen. (32.)

Clinical Remarks.—Metallic-silver is said to have caused colic by being handled. (3. 54.) It deserves attention against excessive gnawing hunger the whole day; in heartburn, with retching of a bitter-acrid badly smelling liquid into the throat, with heat of the head, and followed by a sense of rawness, roughness and burning in the throat. (11.)

Stool. Frequent urging to stool, with scanty discharge of fæces. Dry, sandy stool. Vomiting during stool. Contractive colic after the morning stool. (32.)

Urine.—Frequent and copious emission of urine. (32.)

Clinical Remarks.—Noack thinks it is useful against diabetes; it has an old reputation against dropsy. (11.)

Genital Organs.—Contused pain in the testicles. Emissions. (32.)

Clinical Remarks.—Teste says that it has cured a yellow-greenish gonorrhœa, of an indolent nature, which produced a very profuse discharge. Teste also states that it has cured seminal losses, without erections, and without atrophy of the penis. (89. 54.) Teste recommends it in scirrhus ulceration of the neck of the uterus, and relates the following case, which was much relieved. The patient was a washer woman of Boulogne, aged fifty years, tall, thin, emaciated and of a very irritable temperament, whose father had died with a cancer of the tongue. The disease was of long standing. This woman, whose face was of a straw-color, down to the lips inclusive, (—a characteristic symptom of the cancerous diathesis,) was troubled with constant distension of the hypogastrium, which was exceedingly sensitive to contact. She felt constant lancinating pains in this region, which she compared to pricks with a pin. There was a tension in the groins, and from time to time crampy pains in the thighs. Her breath was fœtid and foul, her appetite pretty good; the digestion took place without pain at the stomach. the alvine evacuations were irregular, she was often taken with a diarrhœa, or rather lenteria. The urine was pale, fœtid and profuse, especially at night. The neck of the uterus, which was very much swollen, presented only a spongy mass, so deeply corroded with ulcers, in different directions, that it was impossible to discover the os-tincæ. The purulent, ichorous, and sometimes bloody matter, which flowed from these ulcers, filled constantly the vagina, from which proceeded such a horrible stench, that it would have been impossible for one to remain ten minutes in the same room

with this unhappy woman, whose approaching death seemed inevitable. Argentum effected a general improvement almost instantaneously. The diarrhœa ceased and the stools became natural. The desire to urinate was diminished one-half. The shooting pains in the hypogastrium diminished, so that the patient was almost free from them for days. A circumstance which appears remarkable, was, that the discharge, although still purulent, lost almost entirely its foul smell—in less than *three days*.—Fleshy, rose-colored granulations, of a very satisfactory appearance showed themselves, at the neck of the uterus. For two or three weeks the patient continued to improve, but finally died. (89. 54.)

Larynx, Trachea, &c.—Sore throat, as if the fauces were swollen; with difficult deglutition. Roughness and scraping in the fauces. Mercurial angina faucium, with raw and sore feeling, when swallowing or expelling the air. Boring and digging in the throat. (32.) Raw and sore pain in the larynx, also when coughing. A good deal of mucus on the chest. Cough caused by a cutting in the windpipe, with watery expectoration. Paroxysms of short rattling cough, in the day-time, with easy expectoration of a thickish, whitish substance. Sensation in the larynx, in the region of the throat-pit, as if there were a wound, worse when talking and singing. (32.)

Clinical Remarks.—This agent has been used very successfully for *chronic laryngitis*, especially in the case of lawyers, ministers, and generally of persons who are obliged to speak a great deal and for a long time in succession. (89.) Laurie recommends it for laryngeal coughs with the following symptoms. Cough, excited by laughing, or attended by a feeling of soreness and rawness in the throat, and sometimes with accumulations of viscid mucus in the palate, which caused a disagreeable scratching or scraping sensation. (90.)

Chest.—Pressure at the chest. Pressure and stitching in the sternum and sides of the chest. Cutting in the sides of the chest, when drawing breath and stooping. Cramp-pain in the pectoral-muscles and near the ribs. (32.)

Clinical Remarks.—Avicenna recommended silver-filings for palpitation of the heart. (89. 54.) It has often been recommended against chronic laryngitis, with an irritating short-hacking cough, with watery expectoration, or of a white thickish, loose mucus, looking like boiled starch, without taste or smell.

Trunk.—Pain in the small of the back, as if lamed and bruised, or drawing, tearing in the shoulders and scapulæ. (32.)

Clinical Remarks.—It promises to be useful when there is coldness of the sacrum, as if the skin and muscles had been touched with a piece of ice.

Upper Extremities.—Tearing and spasmodic drawing, with pressure, also tension in the arms and hands. Pressure, with tearing in the

bones and joints of the hand and fingers. Contraction of the fingers. (32.)

Clinical Remarks.—We have already seen that Huber supposes that it exerts a specific action upon many of the joints, bones, muscles, tendons, ligaments, &c.; it is most homœopathic when there is a painful lameness of almost all the joints of the fingers, excessively violent electric shock in the arms, painless twitching and jerking of the muscles of the arms, painless jactitation of the muscles about the shoulder-joints; inflammation of the tendons, with redness and contraction of the tendons of the arm. It promises to be useful in paralysis agitans. The most violent pains are felt about the left fibula and right shoulder. (11.)

Lower Extremities.—Coxagra, with paralytic aching-pain in the hip-joint when walking. Muscular twitchings in the thighs. Crampy cutting and tearing in the knees and ankles. Crampy feeling in the calves, with pain as if the muscles were contracted. Pain as if bruised and beating in the tarsal-joints. Tearing in the bones and joints of the feet and toes. Numb feeling in the heel and tendo Achilles. (32.)

Clinical Remarks.—Huber thinks that it acts specifically upon the muscles about the joints, and is apt to produce involuntary jactitation of these muscles. It deserves attention in lameness and pain as if sprained about the back, loins and hips, with pain in the glutei muscles and muscles of the hip-joint, as if bruised, with weakness of these parts, as if the ligaments and muscles had become relaxed; repeated attacks of painful lameness, as if penetrating the marrow of the bones in short, in many arthritic and neuralgic pains about the back, loins, hips, thighs and legs. (11.)

Skin.—Stinging in various parts of the skin, like flea-bites. Stitches in various parts of the skin, as of electric sparks, in the day-time. (21.) Sore and burning pimples. (32. 54.)

ARGENTUM-NITRATUM.

NITRATE OF SILVER.

Lunar Caustic.

AUTHORITIES.

Pereira's Mat. Med. (3.) Christison, on Poisons. (9.) Waring's Ther. (44.) Trousseau and Pidoux, Mat. Med. (38.) Noack and Trinks. (19.) Snelling. (46.) Jahr's Manual. (32.) London Lancet. (52.) Wood's Therapeutics and Pharmacology. (7.) Wood and Bache. (7.) Peters' Dis. of Eyes, p. 57. (11.) Peters' Dis. of Married Females, p. 81. (11.) Teste, p. 116. (36.) Condie, Dis. of Children. (80.) Barlow's Pract. Med., p. 417. (81.) Lawrence, on Eye. (82.) Wilde, on Ear. (83.) Acton, Dis. of Urinary and

Generative Organs. (84.) Grisolle, *Pathologie Interne*, Tome 11, p. 15. (85.) Braithwaite's *Retrospect*, Vol. 35, p. 159. (14.) Meigs' *Dis. of Uterus*. (86.) Marcy, in *N. Am. Jour. Hom.*, Vol. 5, p. 94. (10.) Jahr and Possart. (32.) Watson. (54.)

GENERAL REMARKS.

Nitrate of Silver results from the application of Nitric-acid to metallic silver. When pure, it forms transparent, colorless, right-rhombic prismatic crystals. When heated it fuses: if the temperature be increased decomposition ensues, and metallic silver is obtained. The fused nitrate forms, on cooling, a whitish striated mass, having a crystalline texture. The salt is soluble in both water and spirit. It does not deliquesce; when exposed to the solar-light, and in the atmosphere it blackens. Nitrate of silver in a glass-tube hermetically sealed undergoes no change on exposure to light. (3. 46.)

TOXICOLOGICAL EFFECTS.

Orfila found that it acted on animals as a powerful *corrosive* poison. When dogs were made to swallow it, gastro-enteritis was induced: (yet we find our allopathic brethren giving it in intestinal irritation, and ulcerations of the lower bowels). No symptoms indicating its absorption were observed. Dissolved in water and thrown into the jugular-vein it produced difficult respiration, convulsive movements and speedy death. (3. 46.)

On man the local action of nitrate of silver is that of a *caustic* or *corrosive*. This might be expected from observing its action on albumen and fibrin, substances which form the principal part of the animal textures. If a solution of nitrate of silver be added to an albuminous fluid, a white curdy precipitate is formed, composed of albumen and nitrate of silver. This precipitate is soluble in caustic ammonia, and in solutions of nitrate of silver, albumen and chloride of sodium. After some time it becomes colored, and ultimately blackish, from the partial or complete reduction of the silver. The action of nitrate of silver on milk, as well as on fibrin, is analogous to that on albumen; that is, a white compound of nitrate of silver, and of these organic substances is at first formed, but gradually the metal is reduced. These facts assist us in comprehending the nature of the changes produced by the application of nitrate of silver to the different tissues. (3. 46.)

CASE 1. Boerhaave has noticed a case of poisoning with this substance, but in very brief terms. He says, it caused gangrene. Schlœpfer, in his thesis, notices a case by Dr. Albers of Bremen, in which croup was brought on by a bit of lunar caustic dropping into the windpipe. M. Poumaredé has related an instance of poisoning with an ounce of the nitrate of silver in solution. A few hours afterwards the individual was found insensible, *with the eyes turned up, the pupils dilated, the jaws locked, and the arms and face agitated by convulsions*. A solution of common salt was immediately given as an antidote.

In two hours there was some return of consciousness and an abatement of the convulsions, but still complete insensibility of the limbs, with redness of the features, and pain in the stomach. In eleven hours he could articulate. For *thirty-six hours he continued subject to fits of protracted coma*; but he eventually recovered. Sixteen hours after taking the poison he vomited a large quantity of chloride of silver. (9. 46.)

Esquirol mentioned a case, in which nitrate of silver was given freely during a period of eighteen months, at the end of which time the patient died, and the stomach was found destitute of the mucous coat over one-half of the inner surface, with several points of corrosion down to the peritoneal coat. (7. 46.)

Clinical Remarks.—We infer from the above, that as the Nitrate of Silver produces no distinct dyscrasia, but merely simple inflammation and ulceration or corrosion, that it is homœopathic to many varieties of simple inflammation and ulceration. Also to convulsions, especially when they arise from disease or disorder, inflammation or ulceration of the stomach, or are connected therewith. It is homœopathic to some forms of coma. (11.)

In large doses Nitrate of Silver acts as a corrosive poison and gives rise to such symptoms only, as might naturally arise from such an agent. The phenomena in such examples are prompt, severe, and limited in number. But in very minute and repeated doses, it produces a great variety of symptoms in various parts of the organism. Among the first effects which have been observed, may be named a direct and positive action upon the abdominal ganglionic system. Kopp remarks, that the “Nitrate of Silver exercises a peculiar dynamico-material effect upon the ganglionic system, the functions of which are powerfully affected by that drug. The results of that action are manifestly and specifically observed (by sympathy) in those organs whose action depends upon the pneumo-gastric nerve; after that in the whole nervous system.” As we advance, its entire specific operations will be noticed. (10.)

PATHOLOGICAL ANATOMY.—*In men and animals*: Dark rose-colored, or bluish-red, or blackish-red, black-spotted, or blackish green lungs; the posterior portions of them are affected in particular, and either equiformly, or in places only. *Condensation of the lungs, as in hepatization*; they neither crepitate nor float on water. *Much blackish blood in the lungs.* Crepitating, anæmic, almost emphysematous lungs. The heart appears bluish-black and is distended with a great quantity of blood; black blood in the left ventricle. Emptiness of the arteries of the heart. *Much black blood in the veins.* *Contraction and smallness of the stomach.* Paleness of the mucous membrane of the stomach. *Small black spots, of the size of a pin's head, near the pylorus,* consisting of corroded portions of the mucous membrane, and forming true perforations—giving the affected portion a sprinkled appearance. *Transformation of the gastric mucous mem-*

brane into a soft pulp; whitish-grey eschars near the pylorus; cherry-redness and inflammation of the stomach in several spots, with very great thinning, even of the muscular coat in others. Dark cherry-red coloring and softening of the mucous membrane of the duodenum. Thickening of the walls of the bladder. Metallic Silver has been found in the choroid plexus, the pancreas, bones, and skin.

Clinical Remarks.—From the above pathological effects we infer that Nitrate of Silver is homœopathic to contraction and probably induration of the stomach; it may also produce paleness of the mucous membrane of the stomach when it is congested or inflamed; it should also be borne in mind in *perforating ulcer of the stomach*, although we have found Arsenicum and Morphine given in alternation, very effectual in this interesting but dangerous disorder; it may also prove useful in *gelatiniform softening* of the stomach, such as often occurs in cholera infantum and other exhausting disorders; it is of course homœopathic to inflammation and inflammatory softening of the gastric mucous membrane. (11.)

It also seems homœopathic to congestion and hepatization of the lungs. (11.)

EXPERIMENTS ON THE HEALTHY.

Schaebert experimented on himself with Nitrate of Silver; he first took one-eighth of a grain in one-half ounce of distilled water, in the morning, while fasting, and only observed a very unpleasant metallic taste and slight burning in the throat; several repetitions of the same experiment only produced like results. (4. 11.)

After taking one-fourth grain, the burning in the throat was somewhat more persistent; after taking three half-grain doses, in the course of three days, the burning sensation became decidedly severe, stools and pulse were not altered, the tongue acquired a dark bluish color in a few places, there was an increased feeling of warmth in the stomach, and slight nausea, *disappearing after eating*. (4. 11.)

After the lapse of a few days, he took one grain, one and a half hours after dinner, and experienced an intense burning in the throat, attended with nausea and retching, without actual vomiting, *but with a paroxysmally increased feeling of warmth and some spasm in the stomach*; the tongue had a dirty brown coating for several days, and a slight diarrhœa occurred towards evening and continued the next day, relieving the pains in the stomach entirely. Besides this, he experienced *annoying and dull pains in the head*, attended with a *peculiar dejection of spirits*, and restlessness. In three days all these symptoms disappeared; but eight days afterwards he took one and a half grains in the morning, fasting; the nausea and inclination to vomit which ensued were *immediately relieved by hearty eating*, but he felt unwell the whole day, and *had dull pains in his head*. (4. 11.)

The above experiments were made with large and crude doses, and consequently but few of the physiological effects of the drug were

produced. Under the appropriate heads, will be found many characteristic symptoms from infinitesimal doses by different healthy provers. (10.)

Clinical Remarks.—It would seem homœopathic to inflammation of the throat, when attended with burning pains; to nausea, vomiting, warmth, and burning in and spasms of the stomach; to pains in the stomach relieved by eating; to *dyspepsia*, when attended with *head-ache*, and a *peculiar depression of spirits*. The above and following experiments with comparatively massive doses, are peculiarly important, as there can be little or no mistake about the genuineness of the effects produced; when infinitesimal doses are used in experiments upon the healthy, it is safe to conclude that nine-tenths of the supposed symptoms are accidental or imaginary occurrences. (11.)

FRANK took small doses of the Nitrate, while he was in perfect health; he soon became indisposed; derangement of the stomach, *heart-burn* and *water-brash* set in, and lasted several days after he discontinued the Silver; he had never suffered in this way before. These symptoms disappeared, but a *neuralgic pain in the left infraorbital region* gradually developed itself and lasted the whole winter; the pain was persistent, and generally not very severe, but occasionally it would become quite severe for a few moments. (4. 11.)

Simultaneously the *action of the heart* became somewhat *irregular*; at times there would be an *intermission* of its beats, with an evident and unpleasant feeling in the chest; if his attention was strongly directed to this point, the action of the heart became still more irregular, but exercise in the open air did not affect it. He had at the same time a constant feeling of fullness in the epigastrium. Sudden and violent exercise of his muscles, such as jumping, or going fast upstairs, and some mental emotions, would produce *rather violent palpitation* of the heart; and all the above symptoms were apt to be increased at night while in bed. (4. 11.)

Clinical Remarks.—It would seem that in Nitrate of Silver we have a truly homœopathic remedy to facial neuralgia, especially when preceded or attended with acidity of the stomach, heart-burn, and water-brash; also for palpitations and irregular action of the heart, when arising from nervous disorders, mental emotions, or gastric derangement. (11.)

Some time afterwards, Frank took four doses a day; for two days, of one-tenth grain each; then two-tenths of a grain, four times a day, for two days more; then three-tenths, four times a day, for one day; then four-tenths as often, for one day; then five-tenths, three-fifths, four-fifths, one grain, and one and one-fifth grains, each four times a day, for one day, when he became so unwell that he had no further inclination to pursue his experiments.

He became and remained *constipated* for eleven days; on the tenth day he began to have an *aching sensation of fullness in the stomach*, after very light meals of bread and milk; his whole abdomen became very much distended on the eleventh day; on the twelfth, *violent head-*

ache was added to the above symptoms, and it was with the greatest difficulty that he could force himself to take any food; his nights were restless, so that he could not stay in bed after 4, A.M. On the thirteenth day there was still greater *disgust for food*, with foulness of taste and tongue; on the fourteenth day he again had *violent headache*, without feeling otherwise unwell, but his night was so disturbed, that he was obliged to rise at 3 o'clock; he could only force down one glass of milk during the whole of the next day, during which the very *violent headache* continued, without nausea; finally, he was much relieved by taking two cups of strong black coffee, his supper tasted excellently, but on the following day he could only take very small quantities of food, on account of *heart-burn*. His desire for food and drink was very slight. (4. 11.)

Clinical Remarks.—It would seem homœopathic to constipation, to entire loss of appetite and disgust for food; aching and fullness in the stomach, with heart-burn and water-brash; to violent headaches returning every other day, and lasting for two days; and to great wakefulness and restlessness at night. (11.) Many of the above symptoms doubtless arose from absorption of the Silver into the blood. (11.)

Nearly all the above symptoms detailed by Frank were, without doubt, due to the specific influence of the Nitrate upon the pneumogastric nerve. The dyspeptic condition of the stomach, the violent headache, &c., being reflected from a primary irritation of this nerve. Another prover who might take the drug as Frank took it, would very likely experience a still larger group of sympathetic phenomena. Another still, taking it in imponderable doses, would probably experience all of the effects of the other provers, and a large number of other phenomena which would naturally arise from a more *interior* and vital operation of the medicine. Farther on, these dynamic symptoms will be enumerated. (10.)

In another series of experiments, Frank took one-fourth of a grain mixed with three grains of sugar of milk; he experienced a very bitter taste, with warmth on the tongue and in the throat; drinking a little distilled water caused slight eructations, and sensations such as attend a *catarrh of the pharynx and larynx*. A few hours after, the same dose was taken solved in one drachm of distilled water, followed by a sweetish taste and sense of warmth in the mouth; an hour afterwards he took half a grain solved in one drachm of distilled water, and experienced the same sensations in a somewhat greater degree; a *scratching sensation in the larynx, which caused him to hawk and cough*; in a quarter of an hour more he felt a warmth between the shoulder-blades and breast-bone, (probably in the œsophagus,) which gradually changed into a slight aching in the epigastrium, attended with insipid eructations; one grain doses, in one ounce of water, only caused a very bitter taste and transient nausea. (4. 11.)

Clinical Remarks.—It seems homœopathic to catarrhal affections of the pharynx and larynx, to cough proceeding from irritation of the throat and uvula, or from the stomach and œsophagus. (11.)

Wood and Bache simply tell us that in very small doses, repeated two or three times a day, Nitrate of Silver produces no other observable effects than those of a gentle tonic and astringent; as improved appetite, invigorated digestion, and perhaps a tendency to constipation. Taken more largely it causes warmth of stomach, and some gastric uneasiness, indicating an irritant action, which, upon a still further increase of the quantity, is evinced by gastric pains, sometimes nausea and vomiting, and occasionally also by griping pains in the bowels, with either diarrhœa or constipation. As to the degree of irritant effect, much depends on its mode of administration, and the condition of the stomach at the time. (7. 46.)

ANTIDOTES.

The best antidote for the poisonous effects of *Argentum-Nitratum*, is *common Salt*. When this substance comes in contact with the Nitrate, Chloride of Silver and Nitrate of Soda are produced, the former compound being comparatively innocuous.

When the local use of Nitrate of Silver occasions pain, relief is afforded by washing the parts with a solution of salt and water. Applied to the hair and nails, the Nitrate stains them black, as in the case of the cuticle, and in consequence, it is one of the substances employed as a hair dye. When recently applied, the black tint of the hair, and even of the cuticle, may be removed by washing with a solution of Chloride of Sodium, and then with Aqua-Ammonia, to dissolve the Chloride of Silver which is produced. (88. 54.) The tincture of Iodine, followed by a solution of Hyposulphate of Soda, or a solution of Cyanuret of Potassium, will also remove stains of the skin produced by this remedy. (88. 54.)

The stains upon linen produced by a solution of Nitrate of Silver, may be removed by wetting the linen in a solution of Bichloride of Mercury, in the proportion of one part of the Mercury to thirty-one of water, rubbing the linen well, and then washing it with cold water. (27.) To detect Silver in stained hair, the latter is to be treated with Chlorine or Iodine, by which Chloride or Iodide of Silver is produced, which is soluble in Ammonia and in Hyposulphate of Soda. It is precipitable from its solution in Ammonia by Nitric-acid. (3. 54.)

Part of the black color of the hair stained by the Nitrate, depends on the formation of Sulphuret of Silver. (3.)

In order to remove Nitrate of Silver-blackness, one drachm of *Acidum Nitricum dilutum* was taken daily in a pint of barley-water, and the face and hands were sponged twice a day with the same; this was continued for several weeks, when to Dr. Ure's great surprise, hands and arms were nearly as white as ever they had been, while the face and rest of the body remained very blue. (11.)

ON THE VASCULAR SYSTEM.

On the Blood.—Nitrate of Silver acts on the system at large through the circulation; of its absorption, or rather of the absorption of the

metal in one form or another, there can be no reasonable doubt. Orfila found Silver in the liver of animals, to which the Nitrate had been given, six months after its administration; in seven months, however, it had disappeared. In addition to this, we have the indisputable evidence of the discoloration of the skin produced by it. Although it forms compounds with albumen and fibrin which are insoluble in water, still it is a fact of great importance in explanation of the operation of the salt on the system that the albuminate of the Nitrate of Silver is soluble in an excess of albumen, and consequently in the blood. Ficin and Seiler, quoted by Berzelius have proved the presence of silver in the chyle and in the blood of the portal-system and in that of the vertebral arteries by direct experiment. It has also been detected in the urine, (see Kidney). (88. 11.)

According to FRANK, if Nitrate of Silver does not come in contact with an excess of saliva, only a portion of it is converted into Chloride of Silver by means of the Chloride of Soda contained in the spittle; while another portion enters into combination with the pyaline in the same way as it does with albumen, which compound is soluble in acids and alkalies, and hence capable of being absorbed into the blood. (4. 11.)

It has also been proven that even when Nitrate of Silver arrives in the stomach undecomposed, that it is not entirely changed into Chloride of Silver by the free muriatic acid contained in the gastric juice; but that on the contrary a portion of it combines with the organic portions of the gastric fluids in like manner as it does with albumen. (11.)

Dr. Dreyer of Moscow thinks that it possesses a certain peculiar and specific power of urging the fibrin of the blood to a more energetic vitality by consolidating its parts, while Kopp found that when he let blood from a vein flow into a solution of eight grains in one ounce of water, that it coagulated with great rapidity and quite firmly. (11.)

Frank concludes that it coagulates the albumen of the blood; also that it diminishes or prevents the absorption of oxygen; it prevents the putrefaction of organic substances and the decomposition of the blood by preventing, or very much limiting the formation of sulphuretted hydrogen. (11.) It appears from the above that Orfila was mistaken in inferring that the Nitrate of Silver is simply a perturbing agent when introduced into the veins; while by its facility of decomposition, it cannot enter the blood through any of the ordinary channels in a quantity sufficient to develop any remote action. When two grains in solution were injected into the jugular-vein of a dog it died in six minutes, difficult respiration being the chief symptom; the third part of a grain caused death in four hours and a half, violent tetanus having preceded death. (9. 46.)

In both animals the blood in the heart was found very black and the lungs gorged or vivid red. (9. 46.)

According to Mr. Blake, the salts of silver when directly intro-

duced into the blood, do not act on the heart, but operate by causing obstruction of the capillary-system. If they are injected into the aorta, the systemic capillaries are obstructed, the nervous system is consequently oppressed, respiration is arrested through the medium of this nervous oppression, and death takes place by asphyxia; the heart continuing to beat vigorously. If again they be injected into a great vein, immediate obstruction of the pulmonary capillaries takes place, so that the blood ceases to be transmitted to the left side of the heart. (9. 46.)

Heart and Arteries.—When given internally it does not often produce general febrile or inflammatory action. Wood says: In any dose in which it is ordinarily given, its influence upon the general functions is not striking. There may possibly be some increase in the frequency and force of the pulse, and the general temperature; but these results are much less observable than from the more powerful of the vegetable tonics. (11.)

But we have already seen from Frank's experiments that it causes the action of the heart to become somewhat irregular, attended with an unpleasant feeling in the chest; while exercise or mental emotions would produce rather violent palpitations. (11.)

In minute doses it stimulates and invigorates the entire ganglionic system, augments the vitality of the heart and arteries, equalizes the circulation, increases the animal heat, and imparts a sense of increased strength and vitality to the whole system. If the dose be increased so that its primary chemical and material action shall be speedily manifested upon the stomach, an opposite result occurs, and we observe a depression of the nervous and vital forces, and a corresponding loss of power in the heart and arteries, with irregular circulation, deranged digestion, neuralgias, tendency to spasms, debility, &c. (10.)

Clinical Remarks.—We would infer from the above that while Nitrate of Silver is homœopathic to many external and superficial inflammations, it is not so to many internal ones, except those of the stomach, bowels, bladder, vagina, &c., to which in fact it is always applied locally. (11.)

It is especially appropriate in cases of enfeebled circulation, and imperfect calorification, which have been superinduced by too much mental exertion, care, grief or other depressing emotion, together with dietetic errors, and sedentary habits. Under such circumstances attenuated doses are capable of rousing into activity the ganglionic system of nerves, and thus of restoring the impaired tone of the circulatory vessels. (10.)

In *angina pectoris* it has been administered in the interval of the paroxysms, with occasional success, by Dr. Coppe and Dr. Copland. (3.)

Wood says, in many local inflammations it acts powerfully as an antiphlogistic (?) remedy. But, though generally effective, the remedy will not always succeed, and, if it fail, may sometimes do harm by its excitant, phlogistic or corrosive influence in acute cases. When

the local affection is the result of the general state of the system, when it is complicated with fever and plethora (to which it is not homœopathic) and, especially in the highest state of inflammatory excitement, the Nitrate of Silver will fail. Nor as a general rule should it be applied under these circumstances. (11.)

Venous System.—It is not positively known whether it exerts any specific action upon the venous system, although it has caused the accumulation of much black blood in the veins; black blood in the left ventricle, much blackish blood in the lungs, &c., &c., when injected into the veins; but these are all probably local corrosive effects upon the blood. (11.)

Glandular System.—It has no known specific action upon the glands.

Clinical Remarks.—It has never been used much in any glandular affections, nor in any scrofulous or dyscratic disorders. (11.)

ON THE NERVOUS SYSTEM.

It is evident, that the Nitrate in small quantities, and the Chloride and Oxide of Silver in larger proportions, are absorbed into the vascular system and thus conveyed to all parts of the body, and consequently also to the nerves, with which they doubtless come in immediate contact. Upon these they may exert an irritant or astringent, or toughening action, and probably the salts of silver may also enter into a chemical combination with some of the constituents of the nervous mass, especially the albumen, and that an actual and tangible albuminate of silver may be there formed, as it is in the blood, and in other parts of the system. In the case of poisoning, before quoted it produced *convulsions*, and hence it seems to act decidedly upon the *motor nerves* of the spine and brain, while clinically it has been found more useful in epilepsy and other spasmodic disorders than in neuralgia, or other affections of the *nerves of sensation*. (11.)

Wood gives a somewhat similar view of its action in nervous affections; he assumes that it is absorbed into the blood and that its action is somewhat astringent, causing contraction of the tissues like Nitrate of Lead, though in a less degree; that it produces a slight increase of the vital cohesion of the molecules of those nervous tissues, which it reaches through the blood; by thus producing a slight cohesion of the molecules of the tissues, they give them a greater power, while by a gentle excitation, they call this power into a somewhat higher exercise. The organized nervous substance, not only of the great nervous centres, but of the individual nerves, take on a condition of greater firmness or compactness, which enables them, if previously weakened, to perform their proper function more regularly and efficiently. It ought not to be regarded as an antispasmodic, although it cures convulsive disorders, but a tonic, to the nervous system. (11.)

We quite agree with Mueller of Vienna, when he asserts "that this

agent effects the organism in two distinct ways. In the first place it affects the nervous system in a peculiar manner; and secondly, it has great powers in producing organic changes in the body." According to this gentleman, it impresses specifically the motor- and sentient nerves, but especially of the abdominal ganglia. The superior ganglia and the pneumogastric nerve are specifically acted upon by the Nitrate, according to Vogt.

While in attenuated doses it imparts tone to the motor- and sentient nerves, and exalts the functions of most of the organs, in large doses it operates as a depressor, and gives rise to various organic changes throughout the entire organism.

Upon the brain it probably exercises no direct action, since most of the supposed cerebral phenomena are reflected from the ganglionic system.

In our judgment its chief specific action is upon the anterior portion of the spinal marrow. We infer this from the phenomena to which it gives rise. (10.)

Clinical Remarks.—Wood says that *epilepsy* is that one of the nervous affections in which the Nitrate of Silver has been given most frequently, and in the treatment of which it has the highest reputation. It is certainly among the remedies which have proved most effectual, so far as testimony can avail to decide the question. Every one knows that epilepsy from the very nature of its sustaining cause is often quite incurable; that the Nitrate, therefore, should very frequently fail is nothing more than might be expected. (11.) Pereira says, in *epilepsy* it has occasionally, perhaps more frequently than any other remedy, proved successful, but its *methodus medendi* imperfectly understood. This indeed is to be expected when it is considered that the pathology and causes of epilepsy are so little known; and that as Dr. Sims has justly observed, every thing connected with this disease is involved in the greatest doubt and obscurity, if we except the description of a single fit and that it returns at uncertain intervals. Pereira conceives Georget's *dictum*, condemning its administration, as "cauterizing the stomach to cure a disease of the brain," to be "absurd and unwarranted," in view of the many facts we have, establishing its efficiency; but at the same time he remarks that in the few instances in which he has seen it tried, it has proved unsuccessful; but this may have been because it was not continued for any length of time, on account of the apprehended discoloration of the skin. (3.46.) Waring thinks that its efficacy is inferior and less uniform than that of the Salts of Zinc and Copper. (44. 46.)

Lead, Arsenic and Conium, from their well known effects in producing palsy, ought to prove the most useful *antipathic* remedies against epilepsy, and other convulsive disorders; but singularly enough, they are scarcely or ever used in the dominant school. I have made a few experiments with Lead, which induce me to infer that cures may be effected with it. (11.)

The allopathic employment of this drug in epilepsy cannot be too

much condemned. Under the most favorable circumstances it does not cure more than one in twenty cases, according to our opinion, and when we consider the discoloration of the skin to which it so often gives rise, and the functional and organic disorders it produces, even these occasional cures do not justify its use. From considerable observation upon this subject, we believe that at least one in five are cured by judicious homœopathic remedies, such as Zizea, Artemesia, Belladonna, Strammonium, Ignatia, Hyosciamus, Plumbum, Agaricus, &c. (10.)

2. As regards its use in epilepsy, Pereira states that it exercises a specific influence over the nervous system; at least, he says, that he infers this, partly from the effects observed by Orfila, when injected into the veins of animals, and partly from its curative effects in epilepsy and chorea. The effects observed by Orfila were difficult respiration, and *convulsive* movements, which would lead us to infer that Pereira regards the Nitrate of Silver as somewhat homœopathic to epilepsy, in which disease he states that it has proved successful more frequently than any other remedy. We know of but one instance in which it has produced convulsions in the human subject, although in dogs it quickly causes convulsions, vertigo, and fainting fits. The distinctive peculiarity of epilepsy is the occurrence of convulsive movements simultaneously with loss of consciousness; according to Hufeland the loss of consciousness is the most essential pathognomonic symptom, for the weakest convulsion with unconsciousness is epilepsy, while even the most violent spasms, if consciousness remain, are not epileptic. According to Noack, metallic silver causes vertigo and infringement of the consciousness, also vertiginous sleep-stupor; feeling of cloudiness in the head, also of dullness and emptiness, sudden confusion of the head with dimness before the eyes; while Portal, Wepfer and Vicat are said to have noticed premonitions of an epileptic paroxysm from its use, probably in epileptic patients. In the experiments upon the healthy it has also been noticed to cause spasmodic twitching in the forehead and temples, also in the lateral muscles of the neck, along the thyroid body, and in the nape; twitching and trembling of the muscles of the thigh, cramp in the calf of the legs. It must be owned that many other remedies produce effects much more like epilepsy than the above, so that *à priori* a homœopathist would judge that it would prove a very uncertain and slow remedy against epilepsy. Still it is said to have gained much and apparently deserved celebrity in the treatment of epilepsy, although in many cases the cure was very long and tedious. Professor Carron is said to have treated a large number of cases with marked success, and cured more than twenty genuine cases with it. In one case $\frac{1}{10}$ th of a grain was taken twice a day by a patient in whom the fits came on every fortnight; in the course of three months the fits occurred only once a month; after six months, only once in seven weeks, and at the end of twelve months he was entirely cured. In a second case, of several years' standing, the Nitrate was taken for three months

without benefit, but then there occurred a marked improvement, for instead of having a fit every week, the patient began to have only one in two months, then two in three months, both of which happened within ten days of each other; in eleven months he was cured of his epilepsy, and of a *strabismus* also. In a third case, eighteen grains a day were taken for three years, with no sensible effect at all, except that of curing an epilepsy of nearly twenty years' standing. Sobernheim says, it sometimes effects a cure very slowly, and often it acts only as a palliative, and the diminished or apparently cured disease returns after a longer or shorter interval with greater intensity. Watson says, the Nitrate of Silver used to be thought highly of in epilepsy, but the truth is, in giving it we run a great risk of obtaining its discoloring effect, for the sake of a very small chance of curing the epilepsy; if it do good at all, it must be given for some time together, and the probability is that it will not do good even then. (11.)

Epilepsy is an essential disorder or irritation of the white or motor substance of the brain, or of some of the motor nerves and muscles, occurring in transient paroxysms.

No pathologico-anatomical appearances either in the brain, or other parts occur so constantly as to enable us to infer that the epilepsy is solely and exclusively dependent for its origin upon them. Thus Graves of Dublin reports a case in which a very fine, robust and intelligent boy, aged nine years, ate five or six hard, unripe pears and drank a large quantity of butter-milk, then fell into a state of insensibility and was convulsed; from that time forth he was subject to epileptic fits; they annually became more frequent and severe, but the vigor of his intellect was not impaired until after the disease had continued six years, when he gradually lapsed into idiocy; for many years he had several epileptic fits daily; twice a year they would return ten times daily, and finally terminate in outrageous madness, when the fits would subside, showing that the irritation had extended from the white substance of the brain to the grey. This state of things lasted for sixteen years, and after death the scalp, cranium, dura mater, arachnoid, pia-mater, together with the cortical and medullary substance of both cerebrum and cerebellum were all perfectly healthy; the spinal marrow and its investments were quite normal. (11.)

Fright is said to cause nearly one-third of all the cases, and this or other mental emotions to cause a still larger proportion of paroxysms. (11.)

Sorrow is said to cause from two to fourteen per-cent.

Idiocy, mania, chorea and other spasmodic affections are said to cause from eight to ten per-cent. (11.)

A certain number of cases arise from malformation of the skull; or from thickness of it, or from bony projections pressing upon the brain, or from caries of the sella-turcica, or from ossification or tumors of the dura-mater, and from organic disease, such as abscess, tubercle, hydatids, &c., of the brain itself. Wenzel thinks he always

found disease of the appendages of the brain, and Bouchet found induration of the brain in twelve cases out of eighteen; while Ferrus almost always found hypertrophy of the brain. Epilepsy may also arise from disease of the spinal marrow. Guislain thought he found induration of the olivary bodies in two-thirds of his fatal cases. (11.)

Some cases of asthma and palpitation of the heart are supposed to be epileptic in their nature, as they sometimes pass over into epileptic attacks, which then may become habitual, without being always preceded by asthma or palpitation. However this may be, transient irregularities of respiration or circulation may bring on attacks of epilepsy in the predisposed. (11.)

Disturbances of the digestive organs, such as indigestion, overloading the stomach or bowels, constipation, worms, &c., often cause epileptic attacks, which cease when the cause is removed. (11.)

Derangements of the sexual organs, irregular or surpressed menstruation, or disease of the uterus or ovaries, or onanism, or excessive coition, or abstinence may excite epilepsy. Still there must be a natural predisposition to the disease, to render these causes operative in this manner. (11.)

Suppression of eruptions or of feet- or other perspirations may cause epilepsy. (11.)

As regards the treatment, *Ammonia*, *Chloroform* and *Ether* are almost the only remedies which can be used, effectively during the paroxysm. (11.)

When epilepsy has been brought on by fright, or generally occurs during sleep, *Opium* is the most important remedy; it may be used during the paroxysm, if possible, and during the intervals, to prevent a return; *Ignatia* and *Artemisia* also deserve attention in these cases. (11.)

When suppressed eruptions or perspirations are exciting causes, *Sulphur* and *Artemisia* are useful. (11.)

When there are derangements of the sexual organs *Cuprum*,[†] *Pulsatilla* and *Platina* have proved useful, and lately the *Bromide of Potash* has been used empirically by Sir Charles Locock, in *hysterical and menstrual epilepsy*; it has been noticed that experimenters, from taking ten-grain doses of Bromide of Potash, three times a day, would become impotent; Locock therefore thought he would try it in cases connected or unconnected with epilepsy, in which there was a great deal of sexual excitement and disturbance, and this he did with much success; he had also given it in fourteen or fifteen cases of menstrual- or hysterical epilepsy, and it has only failed in one, and in that one the patient had fits, not only at the time of menstruation, but also in the intervals. (11.)

CASE.—Fourteen months ago he treated a lady who had had *hysterical epilepsy* for nine years, and had tried all the remedies that could be thought of by various medical men, without effect. She began to take the *Bromide of Potash* just after having passed one of her menstrual periods, in which she had had two attacks. She took

ten grains, three times a day, for three months; then the same doses for a fortnight previous to each menstrual period; and for the last three or four months she had taken them for only a week before menstruation. She did not have an attack during the whole period of fourteen months. I have cured similar cases with Baryta-muriatica, Belladonna, Stramonium and Camphor. (11.)

When epilepsy arises from colic, constipation or indigestion, *Nuxvomica*, *Hyosciamus*, *Chamomilla*, Cuprum, Plumbum, and Nitrate of Silver are the principal remedies. (11.)

When it is caused by worms, *Turpentine* is an important remedy, also the other worm medicines, especially *Santonine*; Turpentine should also be thought of in those cases which arise from irritation of the urinary organs, and from flatulence. (11.)

Among the empirical remedies which have been found most useful are *Oxyde of Zinc*, *Nitrate of Silver*, *Valerian* and *Belladonna*. Of these ZINC is considered the most useful and safe. In thirty-one favorable cases, Herpin effected twenty-six cures, and failed only in six; in five unfavorable cases he effected two cures and failed in three. (11.)

VALERIAN is thought to be almost as useful as Zinc; still, of seven favorable cases, Herpin only cured four; and of two unfavorable cases, only one. (11.)

BELLADONNA was very useful in Debreyne's hands.

With CUPRUM, Herpin cured four favorable cases out of six; but no unfavorable cases. (11.)

ARTEMISIA is thought to rank next to Valerian, (11.)

Selinum-palustre is placed by Herpin before Valerian and next to Zinc, as he cured four favorable cases out of five, and one unfavorable case. (11.)

If epilepsy frequently arises from induration of portions of the brain, or of the olivary bodies, Plumbum, Nitrate of Silver, Zincum, Cuprum, Alum and other astringent and toughening remedies must be more or less homœopathic. (11.)

In those cases which arise from ossification of the membranes of the brain, or from bony projections from the skull or dura-mater, the long-continued use of Phosphoric-, or Muriatic-, or some other acid might be tried. (11.)

When there is hypertrophy of the brain, Iodine, Hydriodate of Potash, Baryta-muriatica, or Bromide of Potash should be tried. (11.)

The diet should be carefully regulated; constipation obviated; pains taken that the functions of the skin be well kept up; the urine should be examined frequently, to see whether a sufficient quantity of urea is excreted; the mind should be kept tranquil, but agreeably employed; fresh air and moderate exercise enjoined, &c., &c. In plethoric cases a strictly bland, vegetable and farinaceous diet should be directed; in anæmic cases, full diet, with meat, and even wine and ale. (11.)

In chorea it has been successfully employed by Dr. Powell, Dr.

Uwins, Dr. Crampton, Lombard and others. (3. 46.) But Agaricus, Belladonna, Stramonium, Iodine and the Hydriodate of Potash are far more useful and safer remedies. (11.)

In *mercurial palsy* the Nitrate of Silver has been successfully employed Dr. Sementini. He gave it in a gradually-increased dose, and in twenty days or more the cure was effected. Similar results followed its use in five cases. (44. 46.) Arsenicum, Sulphur and Strychnine will probably prove more useful and safe. (11.)

ON THE TISSUES.

Dermoid Tissue and Skin.—Applied to the *skin* it produces first a white mark, owing to its union with the coagulated albumen of the cuticle; gradually this becomes bluish-grey, purple, and ultimately dark-brown, and then black, owing to the partial reduction of the silver. If the integuments be moistened, and the Nitrate applied three or four times, it causes at the end of some hours *vesication*, which is usually attended with less pain than that produced by Cantharides. In some cases it excites acute pain. In one case in which Pereira applied it freely to the scalp for a cutaneous affection, fever with delirium was produced, which endangered the life of the patient, a girl of six years. This fact is deserving of notice, because in Mr. Higginbottom's "*Essay on the use of Nitrate of Silver*" we are told, that applied as a vesicant, it causes scarcely any constitutional irritation, even in children. In a few days the black and destroyed cuticle cracks and falls off, without any destruction of the subjacent *cutis vera*. (3. 46.)

There is another effect upon the skin following its internal administration, which would prove its absorption, even though other evidences of it were wanting. The peculiar *blueness or slate color*, or *bronze hue of the skin*, has been produced in many patients who have continued the use of the Nitrate during some months and years. In some cases the patients have been cured of the epilepsy, for which they took the medicine, and in others it has failed entirely. In some cases the discoloration undergoes no diminution for many years, and in others it gradually fades in intensity. The corion is the essential seat of it. Dr. Baddeley found that blisters rose white, a proof that in his mind the coloring matter was below the epidermis. But in some instances the cuticle and corpus mucosum of the face and hands participate in the tint. In one instance the mucous membrane of the stomach and intestines was similarly tinted. A case is mentioned by Wedemeyer, of an epileptic patient, who was cured by Nitrate of Silver, but eventually died of diseased liver and dropsy; all the internal viscera were more or less blue. (3. 46.)

The discoloration of the skin is usually regarded as incurable and permanent, but it has been reported that in one case washes of dilute Nitric-acid diminished it. If this be true, it would be well to combine with the external, the internal exhibition of Nitric-acid. It has been suggested to combine the Nitrate of Silver with Nitric-acid

in its administration: and the suggestion certainly is deserving of attention. A steady course of Cream of Tartar is also reported to have cured a case of discoloration of the skin. (3. 46.)

Clinical Remarks.—It would seem that Nitrate of Silver is homœopathic to many discolorations of the skin, to vesications and ulcerations. (11.)

As it is evidently absorbed into the blood and acts prominently upon the skin and kidneys, it may possibly prove to be a remedy against those intractable cases of *disease of the supra-renal capsules* which are attended with *Bronze skin*. (11.)

The late Dr. J. F. Pœbles of Virginia, found it remarkably efficient in certain cases of *Jaundice* connected with an irritable condition of the stomach and small intestines. (88. 11.)

It may prove useful against *chloasma*, *maculæ hepaticæ*, and freckles.

Of all surgical remedies, says Trousseau, Nitrate of Silver is the most useful, and it ought to take the same rank in surgery that Quinine and Opium take in medicine. Nor is it any less important to the practitioner of homœopathy; for as a *vitality-modifying agent*, it has no superior. The instances in which it is homœopathically indicated as a topical application, are quite numerous and important. This will be fully appreciated by those of our school, who receive *similia similibus curantur*, in its most expanded and liberal signification.

In disease the vitality of the affected tissue is altered by a morbid agent acting directly upon the part. If the morbid agent is virulent and impresses actively the tissue, it may lead to disorganization before the natural recuperative forces of the system can neutralize its action. It is in such cases that *another* vitality-modifying agent, more harmless and tractable in its nature, may be brought to bear in such a manner as to destroy the effect of the primary morbid influence. If this second agent can be applied directly to the diseased spot, instead of first passing into the stomach, from thence into the blood, and finally from thence to the disordered structure, so much the better, provided the drug is homœopathically indicated. In other words, if a drug when locally applied, is capable of neutralizing a primary morbid influence and of substituting in its place a harmless and self-curing drug-action, such drug is strictly homœopathic. (10.)

Among the effects ascribed to the local application of Nitrate of Silver to the skin, we may cite a vesicular condition, resembling erysipelas.

M. Jobert De Lambelle first employed it topically in erysipelas, and with marked success. He admits the importance of attending to the general state of the system in both surgical erysipelas and that dependent upon an internal cause; but he deems the local manifestation of the disease still more important. He therefore advises the application to the affected parts, twice daily, of a pomade composed

of two parts of Nitrate of Silver and four parts of lard. This pomade, besides the black color it produces, causes a vivid irritation and the development of an acute vesicular inflammation.

In eruptive diseases like small-pox, zona, impetigo, &c., Bretonneau advises light cauterizations over the eruptions, in order to arrest their progress. (See "Skin.") (10.)

Skin.—*From internal use*: peculiar discoloration of the skin, (*argyria*) from the bluish-grey, violet, or bronze-colored tints to the real black. Small, itch-like pimples, (vesicular) bleeding when scratched, and becoming covered with bleeding scurfs. Pustulous ecthyma, coming on after itching, or pain in the affected part. Wart-shaped excrescences on the skin. (1.)

From external use: Vesicular inflammation resembling erysipelas. Vesicular eruption like varicella. Pustules like those of small-pox, from repeated light applications to the same parts. Inflammation followed by ulceration of the skin, from repeated and thorough applications. (10.)

Clinical Remarks.—As an external agent its use is extremely valuable. It is employed sometimes as a *CAUSTIC*, and as such it has some advantages over potassa fusa, and the liquid corrosives. Thus it does not liquefy by its application, and hence its action is confined to the parts with which it comes in contact. It is used to remove and repress spongy granulations in wounds and ulcers, and to destroy warts, whether venereal or otherwise. It is applied to chancres on their first appearance, with the view of preventing bubo or secondary symptoms. This practice has the sanction of Hunter. Pereira has several times seen it fail, perhaps because it was not adopted sufficiently early. (3. 46.)

The application of Nitrate to punctured wounds is often attended with most beneficial results. Although a *caustic and corrosive remedy*, it prevents or subdues inflammatory action in a surprising degree and homœopathic manner. It is as well adapted to poisoned as to simple wounds. To promote the healing of ulcers, it is a most valuable remedy. In large indolent ulcers, particularly those of a fistulous or callous kind, it acts as a most efficient stimulant. To small ulcers, it may be applied so as to form an eschar, and when at length this peels off, the sore is found to be healed. Mr. Higginbottom asserts that in every instance in which the eschar remains adherent from the first application, the wound or ulcer over which it forms invariably heals. Dry lint will in general be found the best dressing for sores touched with the Nitrate. (3. 46.)

Nitrate of Silver has been proposed by Mr. Higginbottom as a topical and homœopathic remedy for external inflammation. It may be applied with great advantage to subdue the inflammatory action of *erythema*, of *paronychia* or *whitlow*, and of inflamed absorbents. In

some cases it is merely necessary to blacken the cuticle; in others Mr. Higginbottom recommends it to be used so as to produce vesication.

The application of the solid Nitrate of Silver is said to be a most effectual remedy for the different forms of *porrigo*, which affect the heads of children. The caustic should be well rubbed into the parts. Pereira has never known this practice to fail, or to cause the loss of hair. When the greater portion of the scalp is involved, the different spots should be cauterized successively at intervals of some days: for as already mentioned, fever and delirium has followed a too extensive use of the remedy. (16. 46.) In *psoriasis* the same medicine was found by Dr. Graves most effectual. An aqueous solution of the Nitrate is also valuable as an astringent or alterative wash in other skin diseases, as *impetigo*. (44. 46.)

Marks upon the skin resulting from the accidental contact of Nitrate of Silver may be removed by applying the tincture of Iodine and following this by the Hypo-sulphate of Soda. Another agent which speedily removes the stain is the Cyanuret of Potassium. (7. 46.)

In *herpes zoster*, or *shingles*, a similar mode of treatment is recommended by Erasmus Wilson. He states that it acts beneficially, and brings the cure to a more speedy termination than if left to itself. (44. 46.)

In *pemphigus* after the bullæ have burst, and excoriations remain, Mr. E. Wilson found that the best application to promote a cure was a solution of the Nitrate of Silver. (44. 46.)

In *molluscum simplex*, he advises touching the tumors with the solid Nitrate, and in some instances, he opens the tumors with a lancet, and applies the Nitrate to the interior. (44. 46.)

Erythema infantum is greatly benefited by being pencilled with a weak solution of the Nitrate. (44. 46.)

In *frambesia* or *yaws*, Mr. Mason derived great benefit from the direct application of the Nitrate to the tubercles; and in one recent case this treatment being continued for a few months, the papulæ disappeared, and no other tubercular yaws were formed. (44. 46.)

Encysted tumors, according to the experience of Mr. Erasmus Wilson, are effectually cured by laying them open with a lancet or bistoury, pressing out their contents, and injecting the cyst with a solution of the Nitrate, or touching its internal surface with the solid caustic. He much prefers this plan to the painful process of excision. (44. 46.)

In *scrofulous enlargement of glands*, &c., Mr. Balman considers that much mischief is done by the indiscriminate use of Iodine frictions, and prefers in the absence of all inflammatory action, pencilling the parts with the solid Nitrate a few times, at intervals of a week or ten days. (44. 46.)

In *porrigo*, *psoriasis*, *impetigo*, and other cutaneous diseases which have resisted milder remedies, the solid Nitrate, locally applied, has

been found effectual. It should not be applied extensively at once, but small portions should be successively cauterized at intervals of a few days. (44. 46.)

Although it is a *corrosive or ulcerative agent*, yet in many forms of *ulcers*, the Nitrate is effectual and homœopathic in establishing a healthy surface, and promoting cicatrization. To healthy ulcers, if extensive, or if exuberant granulations exist, to weak and indolent ulcers, and also to irritable ulcers, the Nitrate may be used with advantage. Mr. Higginbottom advises, when the ulcer is not very extensive, and free from inflammation, to apply the Nitrate in substance to the sore, and also very lightly to the surrounding skin; a scab forms and in most cases when suppuration ceases and the scab is removed, the cicatrization is complete. After the application of the Nitrate, the ulcer should be covered with gold-beater's skin and exposed to the light. If suppuration continues, an incision is to be made with a lancet in the centre of the eschar, to allow of the escape of the pus. (44. 46.) It must be more efficacious than Lead-washes and other simple astringents, because even if it be somewhat astringent in its action, it is also homœopathic to inflammation and ulceration. (11.)

As an application to *dissection wounds*, it is advised by Mr. Stafford; it should be applied to the parts surrounding the wounds and along the inflamed absorbents, if inflammation has supervened. It seemed in some cases to arrest the progress of the disease. It should be applied as early as possible, and not allowed to interfere with the constitutional and other treatment. (44. 46.)

As a preventive against *hydrophobia*, Mr. Youatt, a most competent authority, extols the Nitrate of Silver. Immediately on the bite being discovered, the caustic should be freely applied to the wound; an eschar forms, and the ulcer should be allowed to discharge freely for some weeks. Mr. Youatt states that he has employed it four times on his own person when bitten by rabid dogs, and that by the early and free use of this remedy he has experienced no ill consequences. Others, however, have not been so successful in its use, and it appears on the whole that excision of the part is the safer plan. When, however, the Nitrate is used, it should be sharpened to a point, and applied freely to every recess and sinuosity of the wound. The same remarks apply to the bites of the cobra and other venomous snakes. (44. 46.)

In *small-pox* the local application of the Nitrate to the pustules, has been proposed as a means of arresting the disease in the vesicular or papular stage, and also of preventing subsequent pitting or cicatrization. This treatment has been particularly recommended by Velpeau, Bretonneau, and Serres. The apex of the pustule is to be removed, and a sharp pencil of the Nitrate to be inserted into each; but the process is tedious and painful, and as has been shown by Girardin, not without danger. A solution of the Nitrate has been successfully substituted; it is to be applied lightly over the surface by means of a camel's-hair brush. (44. 46.)

Bretonneau and Serres recommend the *cauterization of variolous*

pustules by Nitrate of Silver, in order to cut short their progress. It is principally useful as a means of preventing pitting, and should be employed on the first or second day of the eruption. The solid caustic is to be applied to each pustule, after its apex has been removed. (3. 46.)

Although Nitrate of Silver is said to have caused a pustular eruption upon the skin, still it is not nearly as homœopathic to small-pox as Tartar-emetic; it is much better to rely upon the internal use of this latter remedy, aided by the external use of a weak solution or ointment of it, if it be thought advisable. (11.)

In *erysipelas*, Nitrate of Silver is used by many surgeons as a cautery, both to the inflamed and the surrounding healthy parts. But Pereira says he has so often seen the disease continue its course as if nothing had been done, that he has lost confidence in its efficacy. He states that he has found Tincture of Iodine much preferable. (3. 46.)

To stop the progress of irritation or erysipelatous inflammation, it should be applied in a circular form around and at a little distance from the inflamed portion. Mr. Higginbottom reports favorably of applying the Nitrate to burns and scalds. (3. 46.)

In *erysipelas*, the Nitrate of Silver as a local application was first proposed by Mr. Higginbottom. Previous to its use, the surrounding skin should be well washed and afterwards dried; the Nitrate may then be applied, care being taken that no interstices are left through which the inflammation may pass and extend itself. This measure is often effectual, but it must be confessed, it occasionally fails, probably in a great measure from the careless manner in which it is applied, and the neglect of proper caution. Another form of application is to pencil the whole of the inflamed surface with the Nitrate, either in substance or solution, so as to cause a slight amount of discoloration. The parts are then to be exposed to the air and kept cool. Tincture of Iodine is thought to be more effectual. (44. 46.)

Velpéau thinks a solution of Sulphate of Iron, a much more useful application in *erysipelas* than Nitrate of Silver. It is evident that as *erysipelas* is often a constitutional affection, and Nitrate of Silver does not produce constitutional, but only local inflammations, that it must often be inadequate to the cure of this disorder when merely locally applied. It is better as a general rule, to use suitable internal remedies, such as Tartar-emetic, Belladonna, Rhus, Apis, &c., conjoined with proper constitutional measures, such as proper diet, cooling drinks, slight saline laxatives, like the Citrate of Magnesia, aided by gentle demulcent local applications, or weak solutions of the proper specific remedies, than to depend mainly upon local applications. (11.)

In what is termed surgical *erysipelas*, we are in the habit of employing it topically, after the manner of Lambelle. As the disease in these instances does not arise from an internal cause, we run no risk in arresting the local inflammation promptly. But when the malady depends upon an internal constitutional cause, we prefer to rely upon appropriate internal specifics. (10.)

In several instances we have applied a saturated solution to the healthy skin around erysipelatous spots, and have apparently arrested the further progress of the disease. (10.)

As a general rule, topical applications of this substance to the skin are inappropriate where the external affection is a manifestation or symptom of some internal disorder, but are often exceedingly useful in mere local maladies. (10.)

Cellular Tissue.—When Nitrate of Silver is applied to an ulcer, it produces a white film, (owing to its union with the albumen, and perhaps also with the Chlorides, of the secretion.) This film in a few hours assumes a dark color, and ultimately forms a black eschar. This hardens, and in a few days becomes corrugated, separates at the edges, and at length peels off altogether, leaving the surface of the sore in a healthy condition. (3. 46.)

In this respect it differs greatly from Arsenic, and some similar agents employed topically as an application to ulcers. Arsenic acts by destroying the vitality of the denuded surfaces, or mucous membranes with which it comes in contact in a sufficiently concentrated state, causing eventually the *death* of the structure, which is thrown off by a slough as a foreign substance. The Nitrate of Silver, on the contrary, acts as a CAUSTIC, causing *instant chemical decomposition* of both the healthy and morbid tissues with which it comes in contact, ceasing only its action when its powers are exhausted. Arsenic, on the other hand, has a peculiar affinity for diseased structures, and will cause the death and separation of morbid tissue, leaving the healthy parts underneath intact, and in the most favorable condition for healing. (46.)

Mucous Membranes.—When applied to mucous membranes, a white compound of the Nitrate with the animal matters of the secreted mucus is formed, and this defends the living tissues, in a measure, from the action of the caustic, so that its effects are not so violent as might be expected. Thus the solid Nitrate may be applied to the mucous surface of the vagina, and even to the os-uteri, in cases of leucorrhœa and gonorrhœa, oftentimes without exciting any pain or inflammation; in some instances, however, it produces smarting pain, which lasts for several hours, but no serious effects have resulted from its use, even when by accident, two drachms of Nitrate have been left to dissolve in the vagina. (3. 46.)

Its chemical effects on the other mucous membranes are analogous to those mentioned; but the pain which it produces varies with different membranes, and with the same membrane in different states. Its application to the conjunctiva is attended with acute pain, though in general it soon subsides. On all these surfaces it acts as an alterative-antiphlogistic, or astringent. (3. 46.)

According to Schlepfer, when introduced into the trachea, it caused inflammation of the windpipe and pneumonia, passing on to hepatization of the lungs, (probably through its action as a local irritant, and

by directly inducing inflammation, (46.) but no symptom of a remoter action, or any signs of the absorption of the medicine. (46.)

Taken *internally* in small doses, it affects the mucous membranes of the digestive apparatus, the air passages, the urethra, the uterus and the vagina, and the eyes. It excites the capillary vessels of these structures, causing in the first instance, a slight sense of irritation, of tingling and itching, with slightly augmented secretion of mucus, followed in from two to four days by a feeling of dryness in the parts, and impaired mucous secretion. (10.)

Externally applied in the solid form, or in a saturated solution, it enters into combination with the secreted mucus, whitening the membrane, producing a burning and smarting sensation, which lasts from one minute to an hour or two, according to the thoroughness of the application and the part acted on. Soon after the cauterization the membrane becomes swollen, the mucous secretion is suspended for a period, varying from a few hours to several days, after which the membrane recovers its normal tone and its usual healthy action. Its special pathogenetic and clinical relations will be noted under the appropriate heads. (10.)

Fibrous Tissue.—*Clinical Remarks.*—In *chronic arthritis*, particularly in that of the hip-joint, Mr. Jobert employs *frictions* of the diseased part with the Nitrate. An ointment containing the Salt is rubbed in daily over the spot, which is then covered with a poultice to promote absorption. The treatment is continued until the disappearance of the disease. If the ointment be very strong, it causes great irritation. It is reported to be successful. (44. 46.)

In *articular effusions*, a solution of the Nitrate, or the application of the caustic in substance, drawn across the joint, previously moistened, at intervals of about a quarter of an inch apart, has been successfully employed by Dr. Moritz, of Coblenz. In either case the epidermis raises in blisters, containing serum. When this is dissipated, the application is to be repeated. In twenty cases in which Dr. Moritz employed this treatment, a cure was effected, whether the effusion was the result of gout, rheumatism, scrofula, or wounds. (44. 46.)

Intellect and Morale.—Sorrowful disposition. Anxiety, which induces one to walk quickly. Irritated mood. Apathy, with great debility and tremulous weakness. Hypochondriac and gloomy mood. Anxiety in the precordial region, sighing, and oppression after dinner. (1.) Spiteful, malicious disposition, with disposition to spit at people, and to commit other indignities. (10.)

Head.—Vertigo, with blindness, and violent headache. Dizziness of the head, like that which precedes an *epileptic* attack. Excessive congestion of blood to the head, with throbbing of the carotid arteries, obliging him to loosen his cravat, accompanied with heaviness, stupefying dullness of the head, great melancholy, weakness of mind, and inability to express himself suitably and coherently. Incisive motion through the left hemisphere of the brain, extending from the occiput to

the frontal protuberance, recurring frequently and decreasing rapidly. Head painful, and seeming to be enlarged. The headache is relieved by tying a handkerchief tightly around the head. Generally the headache is accompanied with chilliness, and sometimes with a general increase of the temperature of the body. Vertigo in the morning, with headache. (1.)

Clinical Remarks.—In headaches, vertigo, and other cerebral disorders, dependent on derangement of the abdominal ganglionic system, attenuated doses of this medicine have often proved curative. If the cerebral ailment is accompanied with irritability, moroseness, and malicious humor, the indication for the remedy is still stronger. It is homœopathic to cerebral congestions, with temporary imbecility and headache, which often precede and follow epileptic paroxysms. From the suggestion of Dr. Gray, in Jahr's Manual, page 136, we have been induced to use it in brain disturbances arising from moral causes, and often with excellent effects. Severe neuralgic headaches caused by over-working the mind, by grief, anger, fear, &c., have often yielded readily to a few doses of the third attenuation. (10.)

In *insanity*, observes Dr. Copland, the Nitrate of Silver has been recommended by Agricola and Kesler, and in circumstances truly indicating the propriety of tonics, and when insanity has been occasioned by depressing and exhausting causes, and in purely nervous cases, it may be of use. It has been considered as more peculiarly suited to the complication of mental diseases, with epilepsy. When, however, this association is dependent upon vascular or structural disease of the encephalon, little or no benefit can result from it. He adds that in one case in which he prescribed it, he was obliged to discontinue it; but that in two others of melancholia, with chronic irritation of the digestive mucous surface, he found it of service. (44. 46.)

In *hysterical headaches*, Dr. Graves speaks highly of the efficacy of the Nitrate of Silver. When the paroxysm has abated, the greatest good may be obtained from it, continued for five or six days at a time. When the bowels are constipated, it would be well to alternate it with Colocynth. In this way it may relieve not merely the headaches of hysterical young women, but those of men, particularly the habitual stomach-headache, to which delicate and literary men are so subject. (44. 46.)

Scalp.—Extremely troublesome itching, creeping and crawling of the hairy scalp, with sensation as if the roots of the hairs were pulled upwards, causing a disposition to scratch all the time. Itching blotches, worse when scratched. (1.)

Clinical Remarks.—In *tinea capitis*, Dr. Graves advises the local application of a solution of the Nitrate of Silver. He advises it to be strongly rubbed into each spot, for which purpose a small piece covered with fine linen and tied to the end of a slender stick, should be employed. When a large portion of the scalp is affected, it requires some perseverance to apply the solution effectually. The hair should be cut

short, not shaved; the scales should be removed by diligent ablution. The solution should be applied and repeated not oftener than once a week. The head should also be kept moistened with simple cerate. Three days after the first application of the caustic, the head may be washed with yellow soap and water twice a day, and the cerate replaced after each dressing. In this, as in other cutaneous affections of long standing, it should always be a matter for consideration how far it is safe suddenly to check it. It is advised by Dr. Graves, to establish a seton at some distant point, before venturing upon it. (44. 46.)

On the Hair and Nails.—Applied to these parts, the Nitrate stains them black, as in the case of the cuticle; and in consequence, it is one of the substances employed as a hair-dye. When recently applied, the black tint of the hair, and even of the cuticle, may be removed by washing with the Chloride of Sodium, and then with Ammonia-water, to dissolve the Chloride of Silver which is produced. (3. 46.)

A solution of Cyanide of Potash also removes with facility Nitrate of Silver stains, whether upon the cuticle, the hair, or elsewhere. Stains upon the hands may be readily removed by moistening a bit of the Cyanide and rubbing it smartly over the discolorations. (10.)

Eyes.—The conjunctiva of the eyes and lids is red as blood. The eyes filled with mucus in the morning on waking. Itching of the canthi. Burning and dryness of the eyes early in the morning when waking. Redness of the canthi, and the caruncula lachrymalis swollen. Dampness of the eyes and slight agglutination of the lids in the morning. Ophthalmia with intense pains. Opacity of the cornea. Ophthalmia, alleviated by cold application and open air aggravated in a warm room. (1.) Rolling of the eyes, with dilatation of the pupils, and insensibility of them to light. Contracted pupils. Dimness of vision, with anxiousness, heat of the face, and lachrymation. Transient, but perfect blindness, with vertigo.

Clinical Remarks.—As a remedy in diseases of the eye, Nitrate of Silver may be advantageously employed either internally or locally, provided it corresponds homœopathically with the symptoms. In all cases depending upon a constitutional cause, internal medication is absolutely essential; while simple local disorders may be readily and permanently removed by topical applications. Scrofulous ophthalmia may be cited as an example of the former class. In this instance no one would think of relying upon collyria or other local applications to effect a cure, but internal medicines capable of reaching the deep-seated cause of the disturbance, would be carefully sought for. In order to cover the totality of the symptoms of such a case, an internal remedy must of necessity be prescribed. (10.)

But when the eye-affection is local and unaccompanied by any general vice or disturbance of the system, the homœopath may with great propriety apply his remedy directly to the diseased part. By this means the natural morbid influence is overcome by the direct action of the drug, so that the parts again speedily resume their normal condi-

tion. Farther on it will be seen that Dr. Dudgeon has expressed similar views upon this point. (10.)

With regard to the topical use of this substance, we are of opinion that it is usually employed much too strongly. In ophthalmias, it is quite common to use applications of from two to four grains to the ounce of water. Such applications may in many instances overcome the primary morbid inflammation, but it often leaves a drug-inflammation quite as tedious and intractable behind. Considerable experience has taught us that very weak lotions, frequently applied to the affected parts, are quite sufficient to supercede the original disorder, and to place them in a favorable condition for speedy recoveries. We usually prescribe, therefore, from one-fourth to one-eighth of a grain of the Nitrate to the ounce of distilled water, and direct frequent applications to be made, until decided improvement occurs.

Internally it has been found most useful in ophthalmic inflammations of a sub-acute character. Among the characteristic indications for its use are, redness and swelling of the conjunctiva and the canthi, burning and dryness of the eyes, or moderate lachrymation, intense pains in the eyes, mucous or muco-purulent secretion, impaired vision, flushed cheeks, the symptoms being relieved by cold applications and aggravated by remaining in a warm room.

In these cases the medicine should not be prescribed stronger than the third attenuation. (10.)

In some diseases of the eye, Nitrate of Silver is, in the dominant school, a most valuable remedial agent. It is used in the solid state, in solution, and in ointment; the solution is applied as a wash or injection, or by a camel's-hair pencil. In deep ulcers of the cornea, a cone of the solid Nitrate is often applied; in superficial ones, a solution is generally employed. There is one drawback to the use of this substance in ulcers of the cornea, as well as other affections of the eye, viz., the danger of producing dark specks in the cornea, or of staining the conjunctiva, and this occurrence is not very rare in allopathic practice. I have seen several instances even in wealthy and beautiful females, although Velpeau says he has employed it in many hundred cases without ever observing such an effect, probably because they occurred in public practice, and did not fall under his observation again, months or years afterwards; the blackening is not produced immediately. (11.)

In both acute and chronic ophthalmia, M. Guthrie employs this Salt in the form of ointment. In acute cases, he says two or three applications will arrest the disease. While many allopathic surgeons hesitate to use Nitrate of Silver in the first stage of acute purulent ophthalmia, all are agreed as to its value in the second stage of the disease, as well as in chronic ophthalmia. Besides the diseases of the eye already mentioned, there are many others in which the oculist is said to find this Salt of the greatest service as a caustic, astringent, or stimulant. (3. 46.)

A moderately concentrated solution is regarded as an excellent application in ophthalmia, with ulcers of the cornea. (7. 46.)

In purulent and gonorrhœal ophthalmia, Mr. Guthrie recommends an ointment containing the Nitrate. He directs the Salt to be reduced to an impalpable powder, (an important point,) and great care should be taken that no metal utensil be used in its preparation. It may be applied either with a fine brush, or with the point of the little finger. It causes great pain for an hour or two, but when this subsides, much relief is often experienced. A strong solution is preferred by many general practitioners, a few drops applied twice or thrice daily; should this cause great pain, a small portion of Olive-oil dropped into the eye affords relief. Mr. Walker advises applying the Nitrate in substance freely to the conjunctiva for a few seconds once a day, insinuating the point beneath each lid. (!) It is said not to be admissible in that form of ophthalmia which supervenes on small-pox. Many surgeons are opposed, however, to this practice, as somewhat too heroic. Mr. Walton, among others, opposes it, considering that applications such as the above which cause pain, are productive of harm; that they greatly irritate the conjunctiva, and induce chronic inflammation. The eye should be well cleansed of purulent matter, previous to its application. (44. 46.)

In the *purulent ophthalmia of infants*, Dr. Mackenzie states that he derived much benefit from a solution of the Nitrate, applied by means of a camel's-hair brush to the conjunctiva. (44. 46.)

In *scrofulous ophthalmia*, a wash composed of Nitrate of Silver is stated to be efficacious, but Dr. Waring says that in his experience most benefit is derived from the treatment first proposed by Mr. Wormwold, and subsequently advocated by Drs. Hocken and Lanyon. The eye-lid is put on the stretch, so as to present a smooth surface, and after being slightly moistened, the caustic is to be passed once or twice lightly over it, so as to produce a slight blackness of the skin. A single application often suffices to remove altogether the lachrymation, the photophobia, &c. Iodine applied in the same manner is said to be equally efficacious. Another mode of treatment proposed, is to pencil the lining membrane of the nares with the Nitrate in substance, or with an ointment (one-tenth) of this substance. The insufflation of it is also advised. (44. 46.)

In *indolent ulcers of the cornea*, which resist constitutional treatment, the local application of the Nitrate will in most cases establish a healthy action. (44. 46.)

In *opacity of the cornea*, it will also be found serviceable. Mr. Bell and Dr. Hamilton have testified to the efficacy of this application. (44. 46.)

Ophthalmia neonatorum. Several cases were successfully cured by Dr. Dudgeon, with Argent.-nitr. 6th, internally, and Argent.-nitr. gr. j. to Aq.-dist. ʒj. externally, dropped into the eyes twice a day. (26.)

Inflammation of the eyes, with pressure and collections of mucus, obliging one to wipe them. Scarlet redness of the eye. Nightly ag-

glutination. Blood-red canthi, with swelling of the lachrymal gland. Clusters of congested vessels coming from the canthi. Redness, puffing and swelling of the conjunctiva. Pustules, ulcers and specks on cornea. (32.)

Dr. Dudgeon, after quoting the effects of Nitrate of Silver upon the eye, observed by Dr. Müller, of Vienna, from small doses taken internally, remarks: "The symptoms of Nitrate of Silver, which we owe to the industry of Dr. Müller, are the more valuable as they were not produced by the local action of Silver upon the eye, but by its action when taken internally in small doses, (from the 2d to the 30th dilution;) they afford a remarkable corroboration of the long-credited specific action of Silver upon the eye, and he believes it proves the employment of eye-washes containing lunar caustic to be efficacious in virtue of their homœopathic action. They teach us, moreover, that in Nitrate of Silver we possess a remedy of remarkable powers in some very important and dangerous inflammations of the eye; a remedy, which to judge *à priori*, is second to none in affections of the mucous membrane of the eye, especially in those of a hæmorrhagic character; *à posteriori* we have ample proofs of its efficacy from the records and experience of the old school. It may be objected that the Allopathic cures were effected by the local applications of solutions of lunar caustic to the eye, and that they were owing to the general stimulant, astringent, or corrosive properties of the drug, and that the quantity used was such as to be quite opposed to the notion of a Homœopathic specific action. To this, Dudgeon says, he may reply, that the stimulant or astringent properties of a solution of lunar caustic dropped into the eye, are insignificant as compared with those of many other substances that have little effect in inflammatory diseases of the eye; one obvious reason of this being, that the instant the solution comes in contact with the secretions of the eye, it is decomposed, and an inert Chloride of Silver is formed, which is speedily washed away by the gush of tears which ensues; thus the action of the caustic is but momentary, and the quantity often infinitesimal." Dudgeon also says, "that he must be allowed to say a few words respecting the use and utility of local applications in eye-diseases." Many eye-diseases are of a strictly local character, attended by no constitutional symptoms whatever; whilst others again are eminently dependent on the constitution of the patient. It is obvious then, that though it would be vain to attempt the cure of constitutional eye-diseases by local remedies, there is no absurdity in treating a purely local disease by local means. For his own part, his experience of the local employment of Nitrate of Silver, especially in oph.-neonatorum, and the severer kinds of catarrhal ophthalmia, has been so striking, that he would be very sorry to dispense with this remedial means in these and other diseases. The solution which he has been in the habit of employing, contained from two to four grains of the Nitrate to an ounce of distilled water, and should be carefully introduced beneath the eyelids with a camel's

hair pencil, once every two, three or four days, according to the severity of the symptoms. *Peters' Diseases of Eyes*, p. 58. (11.)

This remedy has been used very successfully in simple, acute and chronic ophthalmia, catarrhal ophthalmia, purulent ophthalmia, scrofulous ophthalmia, thickening of the palpebral conjunctiva, deep ulcers of the cornea, tumors of the eye, and staphyloma. (82.)

When used for staphyloma, tumors of the eye, or ulcers of the cornea, it may be applied by using the solid stick pointed in the form of a cone. In other cases it should be applied in the form of a solution, either by using a camel's-hair brush, or by dropping it into the inner canthus of the eye, by means of a glass rod, when the eye is closed and the head turned back. When the eye is opened, the solution is then at once diffused over the whole conjunctiva. The latter method is to be preferred in cases where we wish to make the application to the whole conjunctival surface, and are using a very weak solution, as of one or two grains to the ounce of distilled water. (27.)

Nose.—Discharge of a whitish purulent fluid, intermixed with lumps of blood. Excretion of a large quantity of bloody serum from the left nostril, with great danger of suffocation (in animals). Disagreeable obstruction in the superior portion of the nose. Itching in the nose. Violent itching in the nose, obliging him to rub it constantly until it looked raw. Dullness of the sense of smell. Much sneezing. Coryza, with constant chilliness, sickly look, lachrymation, sneezing, and such a violent stupefying headache that she had to lie down. Ulcers in the nose, becoming covered with yellow crusts. (1.)

Clinical Remarks.—In several cases of chronic catarrh, with ulceration of the Schneiderian membrane, offensive muco-purulent and bloody discharges, loss of smell, frequent catarrhal headaches, and occasional formation of crusts in the nostrils, we have derived much benefit from the internal use of the third dilution of the Nitrate, and occasional topical applications, by means of a suitable syringe, of moderately strong solutions of the drug. By the same means we have cured a few cases of herpetic eruptions extending into the nostrils. But in these instances a long course of antipsorics is usually required. (10.)

In *coryza* M. Tessier speaks highly of the efficacy of pencilling the interior of the nares with a solution of the Nitrate. (44. 46.)

Ears.—Ringing in the ears and deafness. Whizzing, and feeling of obstruction and hardness of hearing in the left ear. Painful stoppage of the ears with headache.

Clinical Remarks.—Wood and Bache recommend its external exhibition in fœtid discharges from the ear. (7. 46.)

In *deafness* depending upon a thickened state of the membrana tympani, Mr. Toynbee states that a great improvement, if not a total cure, will follow the use of a solution of the Nitrate. Proceeding from the exterior of the orifice of the meatus, the passage may be touched to an extent varying from one-half to two-thirds of its length

every three or four days. In some cases the membrana tympani may also be washed with a solution. (44. 46.)

In obstinate otorrhœa, Mr. Wilde advises the application of the Nitrate *lightly*, to the external auditory passage. (44. 46.)

Face.—Convulsion of the facial muscles, with spasmodic closure of the jaws. Paleness of the face. Convulsions of the upper lip (in animals).

Mouth, Lips, Teeth and Jaws.—The teeth become affected and decayed. Constant pain in the teeth, especially when chewing, when eating sour things, and when introducing cold substances into the mouth. Dull pain in the left side of the lower jaw. (1.) Black teeth. Spongy, easily bleeding, but neither painful, nor swollen gums. Blueness of the tongue. (3.) Dry tongue. Ptyalism. Ulcerated crusts on the mucous membrane of the mouth. (1.)

Clinical Remarks.—In inflammatory affections and ulcerations of the mucous membrane of the mouth and fauces, Nitrate of Silver is sometimes a most valuable application. When the fibrinous exudation of croup commences on the surface of the tonsils and arches of the palate, its further progress may be stopped, according to Mr. Mackenzie, by the application of a solution of Nitrate of Silver. The solid Nitrate has been introduced through an aperture in the trachea, and applied to ulcers on the inner surface of the larynx, in a case of phthisis laryngea, with apparent benefit. (3. 46.)

Wood and Bache recommend it as a healing wash, (a solution of half a grain to the ounce of distilled water) for the mouth, in the case of ulcers produced by Mercury. In the inflammation of the mouth from mercurial salivation, M. Bouchacourt found a concentrated solution of the salt, applied to the gums, base of the tongue, &c., with a camel's-hair brush, very useful; also in aphthous affections of the mouth, and spongy gums. (7. 46.)

Dr. Symonds speaks of it as highly efficacious in aphthous ulcerations of the mouth, when applied in substance to the ulcers. (44. 46.)

In *ptyalism* he also states that in his experience, the best local application is the Nitrate of Silver, either in substance or in a strong solution, applied by means of a camel's-hair pencil to the gums. (44. 46.)

Fauces.—Heat in the pharynx. Sensation as if the veil of the palate were swollen, when moving the tongue, and on swallowing. Dark redness of the uvula and fauces. Pain in the right side of the throat, as from an ulcery sensation or as if a splinter were lodged in the throat, when swallowing, eructating, breathing, stretching and moving the neck. Sometimes an undulating jerking and pulsating was felt in the throat, continuing for several days. Paroxysm of cramp in the œsophagus. Spasmodic contraction of the œsophagus, with great distention of the stomach, feelings of strangulation, faintness, nausea, ptyalism, ineffectual efforts to eructate; but relieved in half an hour by frequent and violent belching of wind. (22.)

Clinical Remarks.—In *whooping-cough*, after the acute stage is passed,

the Nitrate is strongly recommended by Trousseau. It is also spoken of in high terms by Berger. Dr. E. Watson relates several cases cured by the application of a solution of the Nitrate to the glottis in the manner advised in croup. (44. 46.)

In *croup* a strong solution of the Nitrate of Silver was first employed by Prof. Mackenzie of Glasgow; more recently it has been successfully employed by Dr. Horace Green, Kesteven, Blakeman, and Bryan. The last physician employed a stronger solution than the others. A small piece of sponge attached to a piece of whalebone, is to be dipped into the solution and the tongue being depressed by the handle of a spoon, it is to be applied freely for a few seconds to the larynx. Great immediate relief and subsequent cure are said to have followed its application in several cases. The employment of the solid Nitrate instead of the solution, not only in croup, but in all laryngeal, and pharyngeal inflammations is recommended by Dr. Peronneau of Paris. Dr. Hatin also employed it in many cases, and in the majority with decided advantage. An assistant is directed to place the child on his knees; with one hand he fixes the hands; with the other he holds the head firmly. The operator places himself in front, holding in the left hand an instrument to keep the mouth open and depress the tongue. In the right hand he holds a *porte-pierre*, bent like a sound, containing a piece of the caustic projecting some lines. The tongue being depressed, the tube containing the Nitrate, is passed into the posterior fauces, and rapidly passed over all points for a second or two. The operation is to be repeated twice; the second almost immediately after the first. It is said to afford almost immediate relief. Moist warm air diffused through the chamber, and the application of hot water externally to the throat, greatly aid the above measures, and should *never* be omitted. (44. 46.)

In *diphtheritis* the local application of a solution of the Nitrate as above, is strongly advised by Dr. West, Mr. Brown and others. (44. 46.)

In *cynanche-maligna*, Prof. Mackenzie spoke highly of the efficacy of applying a solution of Argent.-nit. to the mucous membrane of the throat. It may be applied with a camel's-hair brush, once or twice a day, according to the severity of the symptoms. (44.)

In *hypertrophy* of the tonsils, the application of the solid Nitrate is advised by Mr. Cusack. It is to be applied to successive portions of the surface, so as to produce a succession of small eschars. By this means a cure is effected in about six months. (44. 46.)

In *scarlatina* Dr. Brown advises the application of a solution of the Nitrate to the fauces, whether ulceration be present or not. It is to be used once or twice daily. He states that previous to adopting this treatment, he lost half his cases, but subsequently during the same epidemic he lost only one in fifty. (44. 46.).

Appetite.—Persistent, nauseous metallic taste. *Excessive thirst* (in animals). *Loss of appetite.* *Disgust.* (32.)

Stomach.—Nausea and vomiting; black vomit. *Hæmorrhage* from the stomach. *Transient warmth* in the stomach; *burning heat* in the

stomach, and in the chest. Transient gastric pains. Heaviness and aching in the stomach. Violent cardialgia. Violent gastritis, soon passing over into gangrene. (32.)

If introduced directly into the stomach, of course it evinces an irritant action, thus, although some English physicians say that they have given it in four or five-grain doses without injury, yet a single grain has often caused gastrodynia, spasms of the stomach, diarrhœa or constipation, nausea and vomiting. Even if it do not exert a specific action upon the stomach, yet it has often been used successfully against gastric affections. Thus Johnson says it cures eructations of an acid burning fluid and of gas from the stomach, which often commence during meals and continue for hours after, although it is a little singular that the Nitric-acid in the lunar caustic should not aggravate acidity of the stomach. The same writer says in almost every case it relieves irritation, flatulence, cutaneous chilliness and discomfort promptly, and even the *melancholy*, which often attends dyspeptic affections; yet we are told that if used long, even in small doses, it will cause various disturbances of the digestion, and Faber has seen extreme dejection and sadness ensue from a short use of it. Other authors advise it against spasmodic tightness of the chest, spasms of the stomach, and such chronic stomach-affections as depend upon a morbid sensibility of this organ, also in pyrosis and gastralgia, viz., Autenreith, James Johnson, Rueff, &c. It has also been employed to allay chronic vomiting from disordered innervation, or from organic disease of the stomach, and to relieve gastrodynia. Vogt says, we generally have no bad effects from its internal use unless it attacks the stomach. Lementini says, a *pustular eruption* frequently appears upon those who are taking this remedy, and when this occurs we may be assured of the beneficial influence of the medicine; yet Autenreith advises it in spasms of the stomach, with burning pain, frequent regurgitation of water, constant vomiting, &c., arising from the suppression of itch, or other metastasis, or from simple acidity of the stomach; and Vogt tells us that the usual dose is one-eighth to one-fourth of a grain gradually increased until nausea, aching and other affections of the stomach and digestion ensue. In all these disorders it is most homœopathic when there is also palpitation or irregular action of the heart. (11.)

A prominent effect of Silver is the production of colic; Dierbach even places it in company with Lead, in a class of metals which cause obstinate colics, when taken in a finely-divided state, or when fumes from them are inhaled; he says, it agrees with Lead, in causing a peculiar and obstinate colic, as has been repeatedly observed in persons who count large sums of silver-money daily; yet it is generally regarded as an antispasmodic remedy in old-school parlance. By others it is regarded as a powerful tonic and astringent remedy, and tonicity and constriction approach more nearly to spasm than to antispasm; however this may be, it has been used successfully against spasms of the stomach, in tremor cordis and stenocardia, while Vogt says, it is specific against colica uterina. (11.)

To the violent action excited by Nitrate of Silver, when directly admitted into the blood, its effects, through the medium of the stomach bear no proportion or resemblance. Thus, when twelve grains of the salt were introduced into the stomach in the solid state, its effects were so slight as not to be distinguishable from those of the ligature on the gullet, placed there to prevent its discharge by vomiting. When introduced in a state of solution, however, and in a larger dose, (in the dose of thirty-six grains for example) it is more energetic. Death ensued in thirty-six hours, but without any particular symptoms; and in the dead body the villous coat of the stomach was found generally softened, and corroded near the pylorus by little greyish eschars like those formed by this poison on the skin. Hence it appears that Nitrate of Silver does not always act remotely, but often simply as a local irritant and corrosive. The corrosion it produces is incompatible with its absorption in large quantity. (9. 46.)

The safety with which large doses of the Nitrate in many cases are administered internally, must depend on the presence of an excess of mucus which normally lines the internal coat of the stomach and of chlorides and free hydro-chloric acid contained in this viscus. These form with the Nitrate new compounds, (albuminates and chlorides) less energetic in their local action than the Nitrate. It is deserving of especial notice that larger doses may be administered without inconveniencing the stomach in the form of pill, than in solution—in consequence, probably of the latter acting upon a larger surface. Dr. Powell has given fifteen grains in the form of pill, while he rarely found a stomach which would bear over five grains in the shape of a solution. It is said that by beginning with small doses and cautiously increasing them, it may be continued for a considerable period without inducing any change in the corporeal functions, though all the while it may be exercising a beneficial influence over disease, evinced by its amelioration of certain affections, such as epilepsy. It is said to have caused an eruption. If the dose be too large it occasions gastrodynia, sometimes nausea and vomiting and occasionally purging. Taken in an excessive dose, it acts as a corrosive poison, but instances of this kind are rarely met with. Boerhaave mentions an instance in which it caused excruciating pain, gangrene and sphacelus of the first passages. (3. 46.)

All the above effects are referrible to its local action, and from them we have no evidence of its absorption, or of the nature of its influence over the system generally. But the discoloration treated of under the head of "*Dermoid tissue*," fully proves that absorption does take place when administered in small but long-continued doses. It exercises a specific influence over the nervous system; at least this is to be inferred from the effects observed by Orfila when it was injected into the veins of animals, and partly from its occasional curative powers in affections of this system, such as epilepsy and chorea. (46.)

.. *Clinical Remarks.*—In chronic affections of the stomach, especial-

ly morbid sensibility of the gastric and intestinal nerves, it has been favorably spoken of by Autenreith and Dr. James Johnson. It has also been employed to allay *chronic vomiting*, connected with disordered innervation, as well as with disease of the stomach (scirrhus and cancer), and to relieve *gastrodynia*. (3. 46.)

For its influence on the stomach and bowels, it might be employed in minute doses as a stimulant, or tonic, in debilitated states of their functions; but other remedies answer the indication so much more conveniently and effectively, that it is very seldom used for this special purpose. Still as it has been supposed to exercise a peculiar influence over the nervous tissue, it has been recommended in certain painful affections sometimes dependent on dyspepsia, as *gastrodynia* and *pyrosis*, and it has been found useful in morbid sensitiveness of the stomach. (7. 46.) It has been empirically recommended on account of its alterative or homœopathic action upon the mucous membrane in a state of chronic inflammation, or *ulceration*; and has been strenuously recommended even in active irritation or acute inflammation of the same tissue. (46.)

Dr. Wood knows of no remedy, in *chronic gastritis*, so effectual as Nitrate of Silver. He has used it habitually since the first recommendation of it, and with the happiest effects in the most obstinate cases. He is not in the habit of using it in mild cases, but in those severe and obstinate forms of the affection, which have set all ordinary means at defiance.

The cases in which it appears to be most beneficial were those attended with *incessant vomiting of food*, and often with a smooth, dryish tongue, apparently destitute of papillæ. He used it too whenever he had occasion to suspect the existence of *ulcers* of the stomach. One case of yeasty vomiting, of a most obstinate character, and probably dependent on an ulcer near the pylorus, yielded in the course of two or three months to this remedy. (7. 46.)

CASE.—One most striking instance in which it was probably the means of saving life, is mentioned by Dr. Wood. It was that of a female patient in the Pennsylvania Hospital, who had been reduced to the last degree of emaciation and debility, and whose death was looked for hour by hour. The stomach had long refused to retain food, and the slightest nutriment induced vomiting. I directed that nothing whatever should be taken into the stomach except a little cold water, and pills of Nitrate of Silver with Opium, repeated three or four times a day: life being sustained by the injection of rich soups with Laudanum into the bowels. The vomiting ceased under the treatment; in a few days a disposition for food returned, which was cautiously indulged, and the patient went on gradually improving until her health was perfectly restored. Dr. Wood thinks that the oxide or chloride will not at all answer in these cases, and that the remedy should be given upon an empty stomach. (7. 46.)

The value of the Nitrate of Silver in dyspepsia was first established by the late Dr. James Johnson, who relates many cases attended

with *morbid sensibility and hypochondriasis*, which yielded to its use. He considered that its probable action consisted in lessening the susceptibility of the nerves, and thereby rendering them insusceptible of irritation. In some cases he thinks it may be advantageously alternated with Quinine. Dr. Copland also bears witness to its efficacy. (46.)

In *gastralgia*, particularly when attended by sour vomiting or pyrosis, the Nitrate has been successfully employed by J. Johnson, Osborne, Boudin, Hudson, Brigger, Steinitz, and Mr. Langston Parker. From the experience of these writers, it would seem as if there are few, if any remedies which exercise a more powerful and beneficial influence. Dr. Symonds, in bearing testimony to its efficacy, states that he has found it chiefly useful in those cases which present a combination of nervous irritability with chronic or passive congestion of the stomach. (44. 46.)

According to Hartmann, Argent.-nitr. is homœopathic in *cramps of the stomach*, especially in females with too frequent and profuse menstruation; great nervousness, and pain so severe as to oblige one to double over, accompanied by violent vomiting of acrid, sour, bitter-tasting fluid of a yellowish-green color. (4. 26.)

CASE 1st.—*Gastritis* in a single woman, aged forty-one years, periodically subject to this affection; I observed the following conditions: vomiting of every thing, even the smallest amount of liquid she took, violent pain in gastric region, tender to the touch; cramps extending to the sternum, with tormenting headache, and considerable thirst; had taken no food for several days; gave Ars., Cupr., Nux, Stibium, and Ipec. with only partial benefit during a period of four days, when I resorted to Argent.-nitr. 1st, a powder to be taken once in three hours, which was followed by the most gratifying results, for after twenty-four hours she was so much better, that further medication was unnecessary. (4. 26.)

CASE 2d.—*Cramp of the stomach* in a man, aged seventy-one years, subject to this condition, with the following symptoms: chills, followed by cutting, crampy, pinching pain extending over the whole of the epigastric region, obliging him to double up at times; towards morning frequent vomiting, thirst, tenderness on touch, also pain over sternal and iliac regions, perspiration over the whole body, rumbling in the abdomen, with incarcerated flatus. Dr. Widemann prescribed Argent.-nitr. gr. 1. to oz. 4. of water with Sacc. Liq., a table-spoonful to be taken every three hours, and gradually at longer intervals; it effected a cure in eight days. (4. 26.)

CASE 3d.—Dr. Lane reports a case in a woman, aged twenty-six, who had been sick five years, having become very much emaciated and weak, complaining of a constant drawing-gnawing sensation in the gastric region, with severe paroxysms of pain, ending in vomiting of a quantity of clear, saltish-tasting fluid; followed by an aversion to all food, or a feeling of weight and fullness; bowels regular; pulse small and weak; expression anxious. Argent.-nitr. for ten days, gradually increased to gr. iv. daily, effected a cure. (4. 26.)

In *ulceration of the stomach* the Nitrate of Silver is regarded in the dominant school as a valuable medicine, inducing a healthy action of the mucous membrane, and apparently favoring the process of cicatrization. (46.)

It is clear from the above testimony that the dominant school have hit empirically and unwittingly upon the right homœopathic use of this remedy in many diseases of the stomach. It is evidently homœopathic to *irritation, inflammation* and especially *ulceration* of the stomach, and homœopathic physicians use it much too little in these disorders. Frank's experiments also prove that it is homœopathic to acidity, pyrosis, vomiting and hypochondriasis, especially when attended with palpitation and irregular action of the heart. (11.)

Dr. A. Houghton has employed the second and third dilutions of this medicine, with satisfactory results, in gastralgia, and other morbid derangements of the stomach, accompanied by much distention of the stomach, pyrosis, acidity and nausea. Dr. Houghton informs us that his success in these cases has been better with these dilutions, than with larger doses, as he formerly prescribed it, when an allopathist. In old and obstinate cases of dyspepsia, this gentleman commends this remedy most highly. (10.)

Nitrate of Silver deserves attention in *perforating ulcer of the stomach*. The symptoms of this disease are sometimes obscure, but in a great majority of cases they are distressing, and according to Bunn, when the disease has lasted some months, they are generally significant enough. (11.)

The most constant symptom is pain in the stomach, which is generally referred to a small spot, and is more severe after meals, when the stomach is distended, and when its vermicular movements are going on. The pain usually abates as the stomach gets empty, to be renewed again by the next meal. Now and then, however, pain is also felt when the stomach is empty. Together with the pain, there is some degree of tenderness, or soreness at the epigastrium; but this is often slight, and like the pain, is generally referred to a small spot. Besides the pain at the epigastrium, pain is very commonly felt in a small space in the corresponding part of the back. There is also occasional eructation of sour fluid, and now and then, perhaps only once or twice in a month, the patient vomits his food. (11.)

Unless the ulcer be large, there is complete absence of fever and of thirst, the appetite is commonly but little impaired, and the patient does not fall away perceptibly in flesh, or in strength. The pain at the stomach after meals, the sour eructations and the occasional vomiting are often the only symptoms of the disease for months; the patient heeding them but little, and following his ordinary course of life.

It is of great importance to watch the vomits closely, for where ulceration is really the cause, streaks of blood will seldom fail to be found some time or another, and in many cases more considerable ejection of blood occurs. These streaks of blood are of the highest value in a diagnostic point of view, because they are extremely rare

in other diseases which may be mistaken for simple ulcer. The hæmorrhage may increase to hæmatamesis ; or the blood may be transmitted downwards with the food, and then may appear in the stools. I have cured cases with Arsenic and Opium, but lunar caustic deserves attention. (11.)

Andral's experiments on dogs proves that starvation will produce evident signs of inflammation of the stomach, such as bright redness, softening and *numerous ulcerations* of the mucous membrane. A strict bread and water-diet will cause a loss of appetite, the stomach becomes weak, there is uneasiness across the stomach, spleen and liver ; and the latter is torpid. The bowels are confined, or they are relaxed, with slimy discharges, unaccompanied with pain ; yet the swollen red tongue indicates the existence of irritation of the mucous membrane of the digestive canal ; the pulse is quick and feeble ; and the clammy skin, vertigo, debility, headache and sleeplessness show how much the constitution suffers from diminished nervous power and excessive destruction of the tissues. In these cases, and those similar ones so frequently met with in delicate females, with perverted and deficient appetites, in whom the very thought of food excites loathing, specific remedies alone will not avail ; a methodical course of feeding and even of stimulation must be resorted to. (11.)

Bowels and Stool.—Constipation. Transient or continued diarrhœa. Evacuations dry and consistent, while they were usually loose. Repeated itching at the anus, inducing him to rub until he became sore. Awakened in the night by a colic, followed by sixteen greenish, scætid and mucous discharges, and emissions of flatulence. Bloody stools, with great debility. Sharp, darting stitches through the abdomen, especially during a sudden transition from rest to motion—on the left side. Colic pains around the umbilicus for several days. (32.)

Clinical Remarks.—Dr. Boudin of Marseilles has employed it in *typhoid fever*, as a remedy for the inflammation and *ulceration* of the ileum which constitute the most constant lesion in that disease. When the gastric symptoms predominate, he gives the Nitrate in pill, in doses varying from the fourth to the half of a grain. When diarrhœa is the principal symptom, he administers, night and morning by injection, a solution of the salt, containing three or four grains to six fluid ounces of water. The injections appear to be useful in promoting the cicatrization of the intestinal ulcers, and were found to extend their operation as high up as the small intestines. (7. 46.)

In *chronic diarrhœa*, especially in that kind attendant on phthisis, Dr. McGregor of Dublin, has found the Nitrate of Silver, alternated with Opium a valuable remedy. Whatever may be its remedial value when internally administered, its occasional effect of staining the skin, should render the practitioner cautious in its exhibition. This effect proves the absorption of the medicine, and it is alleged that it shows itself, (like other forms of mineral impregnation) first upon the tongue and fauces. According to Dr. Branson, an indication of

the approach of discoloration is furnished by the occurrence of a dark-blue line on the edges of the gums, very similar to that produced by Lead; but somewhat darker. This discoloration of the skin is said to be removed by a steady course of Cream of Tartar. (7. 46). Graves of Dublin also regards it as one of the best remedies which can be administered in the diarrhœa of phthisis. (44. 46.)

Ulcers intestinorum. Breithaupt reports a case of a patient affected with ulcers of the intestines subsequent to an attack of typhus and dysentery, where all hopes of recovery had nearly been given up,—he received Argent.-nitr., one-twelfth to one-sixth of a grain, four times daily—a favorable change became very soon perceptible, the bloody discharges became less frequent, and the cure effected very speedily. (4. 26.)

In *ulceration* and *hæmorrhage* of the bowels, dilute Nitric-acid, by the mouth and by enema, is a much more manageable, and perhaps useful remedy, than Nitrate of Silver. (11.)

In *chronic enteritis* great benefit, is said to have accrued from the Nitrate of Silver, though Dr. Wood thinks that it is less efficacious than in gastritis. It probably seldom enters the small intestines, or at least penetrates far into them without being decomposed. In ulcerative affections and chronic inflammation of the small intestines, it has appeared to him less effective than Sulphate of Copper. (7. 46.)

Trousseau urges its use in *infantile diarrhœa*. In cases attended with tormina, and glairy or bloody stools, he gives morning and evening an enema consisting of eight ounces of distilled water to one or two grains of the Nitrate, according to the age. (38. 46.)

Argent.-nitricum, gr. j. to Aq. oz. j. is recommended by Kurtz in *diarrhœa* with greenish, watery discharges, slight pinching pain in the bowels, accompanied with sour taste in the mouth; also a solution of gr. j. to ij. Aq. oz. j. in doses from twenty to sixty drops.

Aphthæ and diarrhœa aphthosa. Dr Hauner has seen excellent results from Argent.-nitr., externally and internally administered, in diarrhœa of children connected with aphthæ. (26.)

In *obstinate diarrhœa of children*, when the Acetate of Lead and other allopathic astringents have failed in arresting the discharge, the Nitrate of Silver often proves effectual. Dr. Willshire observes on this point, "I know nothing like Argenti-nitras for stopping the diarrhœa, even if it does no more than this—but I think that it does far more. It appears to me to alter the general assimilative functions." (44. 46.)

In *acute dysentery* Trousseau was among the first strongly to recommend it, both in the form of pill and enema. In *dysentery*, acute and chronic, the Nitrate of Silver has recently been extensively employed, and has attained a high character as a remedy in these affections. The following is a brief sketch of the mode of treatment advocated by Dr. Hare of the Bengal Med. service; and which in other hands has also been found highly successful in the *acute* stage. (It may not be amiss for us to copy it entire, as a valuable hint in this

obstinate affection. (46.) He commences his treatment with the use of large enemata thrown into the colon, in the manner first introduced by Dr. O. Beirne. The patient is placed on the left side, and the flexible tube of a stomach-pump is cautiously introduced, per rectum, about six or seven inches, or at any rate until it reaches above the sigmoid flexure of the colon; three, four or even six pints of warm water or milk and water, are then injected, and this on returning per rectum, will, in many instances, be accompanied by large masses of hardened faecal matter. If much does not come away, he advises its repetition twice or thrice. It requires to be employed daily. Should the retained faecal matter have given rise solely to irritation, or inflammation, these will yield to the appropriate remedies, but should they have been retained such a length of time that ulceration has taken place, then Dr. Hare advises the employment of enemata composed of fifteen grains of the Nitrate to two pints and a half of distilled water, in the same manner as the preceding ones. Dr. Hare observes that it has often been found that when small injections of the Nitrate with an ordinary glyster-pipe, have been employed in dysentery, and the patient has died, the ulcers which had been reached by the Nitrate were perfectly healed, whilst those beyond the reach of the application, had gangrened and death had ensued. From this Dr. Hare rationally concludes that if the ulcers of the rectum healed under the application of the Nitrate to their surface, those beyond, which cannot be reached by the ordinary injection apparatus, would also heal if subjected to the same application. He consequently employs the long flexible tube, and by this means applies the Nitrate in solution to the whole surface of the transverse colon, the chief seat of dysenteric ulcerations. Dr. Hare who has extensively followed this mode of treatment, as well as many other medical officers in India, bear witness to the great success which has followed its adoption. In conclusion it should be remembered that it is not *always* easy or even practicable to introduce the tube as recommended above. The natural sharp fold at the junction of the rectum and colon may cause obstruction, and Mr. Earle has shown that the bowel not unfrequently makes a horizontal curve to the right before descending into the pelvis. Great caution is therefore necessary in the introduction of the tube, otherwise the intestine may be perforated, or other serious mischief ensue. It may also be fairly questioned whether so large a quantity of the Nitrate as fifteen grains, may be applied to an extensive mucous surface, without absorption, thus causing serious constitutional disturbance. (44. 46.)

In *chronic dysentery*, the above treatment, with some modifications, is equally applicable. Dr. McGregor, who has had extensive experience in this disease as it occurs in India, recommends the *Argentum Nitratum*. He also gives it internally, and adds that the effect is often wonderful; but its action must be watched, particularly on the stomach; though its action on this organ is less marked than that of Sulphate of Copper, or Acetate of Lead, while its action on the ulcers is much

more beneficial. The Nitrate as a remedy for dysentery was employed in the form of enema by Dr. Osborne, of Dublin, in 1831, and Dr. Hudson states that it has been in common use in Dublin since that date. He adds that in his own practice, as well as in that of others, the best effects have followed its use. In conclusion, Dr. Waring adds his testimony to that of all the others, when given internally. He has employed it extensively in the later stages of acute and in chronic dysentery, in doses never exceeding a grain and a half daily, and in almost every instance its administration has been followed by speedy and permanent improvement. Its effects are often very remarkable. He has never seen any ill effects follow its use, though given to a child two years old. (44. 46.)

In *cholera*, Mr. Garlike states that he has successfully employed the Nitrate of Silver. The mode of application which he advises, is to inject into the colon by means of a long flexible tube, a solution of the Nitrate. Ten minutes afterwards, he administers another enema of gruel, containing Opium. In the first case in which he employed this treatment, the patient was in a state of collapse, apparently sinking fast. After the introduction of the Nitrate, the purging ceased, but the vomiting continued; after forty-eight hours, the bowels acted naturally. A complete cure followed. Several others were treated in precisely the same way, with equally happy results. (44. 46.)

The above clinical extracts are from standard allopathic works, and comprise the experience of the old school with regard to this drug in bowel affections. The homœopathic physician who is familiar with the recourses of his own school in this class of maladies, will have no occasion to resort to these violent and doubtful measures. He has remedies far more efficient and harmless for almost every conceivable ailment of the organs under consideration, and he will prefer to employ these thoroughly, before resorting to a caustic. We quite disagree with Trousseau, when he asserts "that we cannot repeat sufficiently often the harmlessness of this remedy, and how little founded are the fears of those physicians who dare not administer it internally." We do not hesitate to enrol ourselves among "those physicians who dare not administer it internally," according to the method of the standard writers of the other school. (10.)

In *Asiatic cholera*, in some instances as much as grs. x. to Aq. oz. j., at one dose, have been administered through a glass tube, in cases with profuse and violent discharges per rectum, even though there may be a considerably high degree of cyanotic condition; but it is contra-indicated in the developed state of asphyxia, after collapse or paralysis. (26.)

Argent.-Nitratum appears to exercise its controlling influence not only on the discharges in cases of cholera, but it ought not to be overlooked in the premonitory stage; neither when the discharges per rectum continue after the absolute cholera symptoms have subsided, especially when accompanied by cardialgia, or pain in hypochondriac- and præcordial-regions; again it is known that Argent.-Nitr. is strongly

indicated in all "catarrhal" irritations of the gastro-intestinal mucous membrane. (26.)

Fr. Hartmann reports a case of *tenia sol.* in a lady with profuse irregular menstruation, passing during such periods much thick, coagulated blood. Present symptoms: Severe paroxysmal pain in gastric, hepatic, and abdominal-regions, with nausea, retching and vomiting of tough slime, with icterous color of the face. *Argent.-Nitr.* 2d, a powder three times a day for a week, during which patient discharged masses of fragments of tape-worm, after which patient gradually recovered. The menstrual difficulty led to the administration of the above remedy. (26.)

On the Kidneys.—Silver has been found in the urine of persons who have been taking the medicine internally. A young man who had used the Nitrate for some time, observed that his urine became muddy soon after being passed, and that the sediment became black if exposed to the light; and when the sediment was digested in Ammonia, Chloride of Silver was detached by neutralizing the Ammoniacal liquor. (9. 46.)

Urinary Organs and Urine.—Emission of a few drops of urine after he had done urinating, accompanied with a sensation as if the interior of the urethra was swollen. Burning sensation in the urethra during micturition. Heat, itching, and titillation of the urethra in the morning during urination. (32.) Increase of gonorrhœal symptoms while taking the medicine. (10.) Violent irritation of the urinary organs. Increased secretion of urine. Involuntary urination, (in animals.) Frequent and copious emission of a pale urine. Scanty and rare emission of a dark-yellow urine. Inability to pass urine in a projecting stream. (32.)

Under the influence of Nitrate of Silver taken internally, Frank found the quantity of urine, *to diminish considerably*; the solid constituents of the urine did not lessen in a marked degree, but there was a not inconsiderable *diminution of urea*; it lessened one and five-tenths grammes, or about twenty-two grains daily. *The uric-acid disappears almost entirely* under the continued use of Nitrate of Silver. Hence it is supposed that the Nitrate enters into combination with the nitrogenized constituents of the blood and organism generally, and prevents their metamorphosis and excretion. (4. 11.)

On the other hand, the *quantity of inorganic salts in the urine is increased considerably*, and this increase is much too great to be accounted for by the mere excretion through the kidneys of the few grains of Silver which are taken; whence it is supposed that in entering into combination with the protein-containing substances such as saliva, casein, gastric juice, blood-serum and fibrin, it precipitates the inorganic salts which are contained in them, and these precipitated salts are finally excreted through the kidneys. (4. 11.)

Clinical Remarks.—It is evident from the above, that Nitrate of Silver is homœopathic to scanty secretion of urine; to deficiency or

entire extinction of urea in the urine; to deficiency of the inorganic Salts and Chlorides. (11.)

It may prove homœopathic to Bright's disease when there is a great deficiency of urea and uric-acid in the urine. (11.)

It is antipathic to *ureous diuresis*, or the *azoturia* of Willis, which is characterized by an excess of urea; the attention of the profession was first called to this disorder by Drs. Bostock and Prout. The urine is generally pale and transparent, but sometimes brownish, is acid when first discharged, and somewhat heavier than in health, the specific gravity averaging 1.020, but at times rising to 1.035; it soon decomposes and becomes alkaline; Nitric-acid added to it usually occasions after a short time, crystallization with the urea, thus indicating an excess of urea; it is said that the daily discharge of urea has equalled nine and a half ounces, while in the healthy state it is only from one-half to one ounce. The symptoms are: much thirst, sometimes increased appetite, a sense of weight or dull pain in the back, a sinking, gnawing or other uneasiness at the pit of the stomach, and more or less debility and emaciation, with an anxious expression of countenance; but the skin is not as dry and parched, nor the thirst as insatiable as in saccharine diabetes. It is apt to attack persons of spare habit and nervous temperament, and generally occurs in those of middle age, and in men more frequently than women; still children are not exempt from it, and sometimes perish under it without the cause being known. From the sallowness of the complexion which often attends it, it is frequently mistaken for bilious derangement. (11.)

It is more or less homœopathic to *anureous diuresis*, or the *anazoturia* of Willis, marked by a copious secretion of a colorless or straw-colored urine, of a density scarcely exceeding that of water, of a faint odor, a weak acid reaction, becoming slightly ammoniacal on standing, and containing very little urea. The attendant symptoms are thirst, a parched mouth, a craving appetite, gnawing in the epigastrium, constipation, dryness of the skin, depression of spirits, debility and emaciation. *Colchicum* is the antipathic remedy to this disorder, and I have several times effected cures with it, before I became acquainted with the homœopathicity of Nitrate of Silver. I have kept anazotureous urine for months in a vial, always slightly, and frequently not at all corked, and under every variety of temperature, and little or no decomposition has taken place. This contrasts strongly with the rapid decomposition which takes place in albuminous, saccharine, and azotureous urine. (11.)

Retention and excess of urea in the system is the cause of much disease and irritation; it is probably quite as frequent an occurrence as retention and excess of bile; many severe headaches, pains, convulsions, attacks of asthma, palpitations, vomitings, diarrhœas, &c., &c., arise from this cause; many obstinate eruptions arise from derangements of the kidneys, and also much sallowness of the complexion, which is only too frequently mistaken and treated for biliousness. (11.)

Colchicum is the antipathic remedy for retention of urea in the system; I have seen much benefit from its use before I was acquainted with the homœopathicity of Nitrate of Silver to this disease. (11.)

Male Genital Organs.—Want of sexual desire, the sexual organs having become shrivelled. Painful coition. Frequent nightly seminal emissions. Chancre-like ulcers on the prepuce. (32.)

Clinical Remarks.—In *gonorrhœa of the male*, the introduction of a bougie smeared with an ointment of Nitrate of Silver, is occasionally a most effectual cure, but the practice is a dangerous one. In one case, acute and nearly fatal urethritis was brought on by its employment. The patient was a dresser at one of the London hospitals, and had practiced this mode of treatment in many instances on the hospital patients with the happiest results. An aqueous solution of the Salt has been successfully used in chronic gonorrhœa. (3. 46.)

In *gonorrhœa*, the Nitrate in solution often proves an effectual injection. Ricord advises it at the outset of the attack. He states that by this means the attack may invariably be cut short, in the first stage. A similar opinion is expressed by Dr. Graves, Mr. Acton, and other experienced writers. The injection is to be repeated, desisting, however, if the discharge is rendered thin and bloody, an ordinary effect of the application. A weak solution of Zinc or Alum should then be had recourse to. (44. 46.)

In the chronic stage of gonorrhœa, this injection also often proves serviceable. (44. 46.)

The *Argentum-Nitratum* has been very useful in gonorrhœa, when locally applied, at or previous to the first appearance of the discharge. It is generally used in the proportion of ten grains to the ounce of distilled water, and applied by means of a glass syringe. It should be repeated twice or three times at intervals of twenty-four hours. (45. 54.)

Mr. Druitt recommends a dilute and almost homœopathic injection of the strength of two grains to eight ounces of water, repeated twelve times at intervals of four hours. This is the best practice, and that which is followed by Carmichael. See *Am. Jour. Hom.*, Vol. 4, p. 139. (54.)

In *strictures of the urethra and œsophagus*, bougies armed with lunar caustic in the points, are occasionally employed with great advantage. When the common bougie is formed, (*cereolus simplex*), the point of it should be heated with a conical piercer, and the caustic introduced while the composition is quite soft. The point of the bougie should then be rubbed on a piece of polished marble, till no inequalities in the size of it appear. (3. 46.)

Notwithstanding that the application of Nitrate of Silver to stricture of the urethra has been advocated by Mr. Hunter, Sir E. Home, Mr. Wilson, Dr. Andrews, and others, it is now but little employed; yet its safety and efficacy in many obstinate cases, when the simple bougie fails, is undoubted, from repeated observation. It is commonly supposed that it acts by burning or destroying the stricture; such is

not the fact. It induces some change in the vital actions of the part, which is followed by relaxation of the narrowed portion of the canal, but which change it is as difficult to explain as the subduction of external inflammatory action by this salt. (3. 46.) According to the law *similia similibus*, the explanation is very easy.

Waring says, a sound should be first passed down to the seat of the stricture, and subsequently a bougie, or an instrument for the purpose, armed with the caustic should be passed down and *firmly pressed on the stricture*. Unless this point is carefully attended to, the caustic will come in contact with the urethra in front of the constricted portion and cause ulceration. This, however, is not the only danger, as the caustic has in many cases become loose, and remained in the passage, an accident likely to be followed by severe consequences. Serious hæmorrhage, also, occasionally follows the application, and it is on the whole an unsafe mode of treatment; although, in cases where there is some degree of permanent stricture *which is exceedingly irritable, a slight touch with a caustic bougie will often afford speedy relief*. It should never be employed if the urethra has been damaged by the previous use of the common bougie or catheter: in this case it will *produce* spasm. Sir Benjamin Brodie objects to the use of the bougie on four grounds:—1st, Although the caustic often relieves the spasm, it also frequently induces it. 2d, Hæmorrhage is a more frequent consequent of the caustic than of the common bougie. 3d, Where there is a disposition to rigors the caustic is almost certain to produce them. 4th, Unless used with great caution it may produce inflammation of the parts behind the stricture, terminating in the formation of abscess. (44. 46.)

To *primary chancres* the Nitrate of Silver is one of the best local applications. Immediately after the first appearance of a chancre the caustic should be applied in substance freely to the whole surface, so as totally to destroy its character. By adopting this practice in the earliest stage of the sore, the venereal poison is decomposed, and its absorption into the system prevented. If the chancre has existed some days and the poison has been absorbed, the application of the caustic can be of little value. To indolent buboes the Nitrate is sometimes applied locally, with the view of stimulating the parts and hastening the process of absorption. (44. 46.)

Mr. Acton advises the cauterization of *chancres* with this article if the patient is seen before the *sixth* day, and states p. 263 Dis. of Urinary and Generative Organs, that a gentleman who had a simple excoriation on his penis, unwisely cauterized it freely, and by this proceeding produced *a pustule precisely similar to chancre*. (84. 54.) This, though emanating from an allopathic source, seems decided evidence of the homœopathicity of topical applications of Argentum Nitratum to chancre. (54.)

We desire to add our testimony to that of the author just cited with respect to the great utility of topical applications of the solid Nitrate to chancres in their first stages, and before the virus has passed from

the local sore. In these cases the poison is actually destroyed, so that nothing is left to be absorbed and to contaminate the system. Reliance can only be placed upon this summary treatment, when the virus is concentrated at the chancre. With equal confidence we commend the abortive treatment of the very first stage of gonorrhœa, by saturated solutions of this drug, as advised by Ricord. While the inflammation is yet very slight and confined to the extremity of the urethra, the malady may always be cut short abruptly by a *single thorough application of this solution.* (10.)

In *spermatorrhœa*, cauterizing the urethra as a means of arresting the involuntary spermatic discharges has been recommended. It was subsequently introduced into France and adopted by Lallemand, who strongly advocates the practice as the most efficacious. Ranking of Norwich also advocates it. (44. 46.)

This remedy was first *used in spermatorrhœa* by Lallemand, who applied it to the prostatic portion of the urethra and mouth of the ejaculatory ducts in the solid form by means of a stilette, which was passed down the urethra in a closed canula, and there the stilette being protruded, the parts were cauterized by a rotary movement of the hand, and the stilette being again withdrawn into the canula, the whole instrument was removed from the urethra.

A similar method is now employed by Mr. Henry Thompson. He uses a closed canula with a stilette at the end of which a piece of sponge is attached. This is saturated with a solution of one or two drachms to the ounce, and when passed down the urethra is protruded—so as to cauterize the parts and then being withdrawn into the canula, the instrument is taken from the urethra. See *Lancet*, April, 1852, p. 296. (52. 54.)

Acton (*Dis. of Urinary and Generative Organs*, p. 175) applies it in the same disease by means of a syringe attached to a properly-constructed catheter, using a solution made in the proportion of ten grains to the ounce. (84.) This is the better method. (54.)

Acton injects a solution of this salt in the proportion of two drachms of the Nitrate to four ounces of water in cases of *chronic inflammation of the bladder*, when the mucous membrane of that viscus secretes a ropy, thick, tenacious matter, p. 153. (84. 54.)

Professor Lallemand of Montpellier has been very successful in *chronic cystitis*, by touching the internal surface of the bladder with solid Nitrate of Silver.

The patient feels the moment it is applied a sharp pain at the neck of the bladder, and in the rectum, described by them as not unlike a pinch—but much more supportable than the continued dull pain of chronic catarrh of the bladder.

Then follows an irresistible desire to pass water, with burning along the urethra, and discharge of a few drops of blood.

This desire is renewed every moment, causing violent but futile efforts at micturition.

These gradually decrease, and on the 2d or 3d day there is no lon-

ger any pain in making water, and a few small grey eschars, like burned paper, come away with the urine. This occurs in a large number of patients. In some the suffering is excessively severe, yet the physician must be careful not to interfere too much, as inflammation is necessary to the cure, i. e. an acute inflammation cures a chronic one. (11.) •

In a majority of cases one cauterization effects a cure—a 2d or 3d may be necessary, but Lallemand never saw a case requiring the 4th. (11.)

In chronic inflammation of the bladder, Dr. McDonnell advises injecting into the bladder a solution of the Nitrate of Silver. He directs the bladder to be first washed out with warm water; the solution to be then injected and allowed to be retained for a few seconds; never above a minute. The quantity of injection used should never exceed 4 ounces. Should the urine be rendered shreddy, or bloody, Opium and fomentations should be used. In all cases the cure has been permanent. (44. 46.)

Female Sexual Organs.—Uterine hæmorrhage. Excited condition of the capillaries of the uterus. Uterine congestions. Suppression of a mucous leucorrhœa. (32.) Inflammation of the mucous membrane of the vagina. (10.)

Clinical Remarks.—In some forms of *leucorrhœa* the application of Nitrate of Silver either in the solid state or in solution is attended with beneficial effects. This practice was first recommended by Dr. Jewel. It is most successful in cases dependent on local irritation, or sub-acute inflammation, and not arising from constitutional debility. The solution may be applied by means of a bit of lint or sponge, or may be injected by means of a syringe with a curved pipe. Its strength must vary according to circumstances. In some cases the solid Nitrate has been applied to the cervix uteri and vagina by means of a silver tube. (44. 46.)

In *leucorrhœa* the nitrate in solution, is advised by Dr. Jewel as a vaginal ejection. It may also be applied in substance. Dr. Hudson states that in uterine leucorrhœa he has derived great benefit from the internal administration of the nitrate. He relates several cases illustrative of its efficacy. (44. 46.)

It appears from the statements of M. Ratier, that Ricord, the eminent surgeon of the Hopital des Veneriennes, at Paris, was the first who employed the Nitrate of Silver in the solid state in the gonorrhœal and other discharges of females. (11.)

Numerous medical men in other countries, as well as in France, have confirmed the results of Ricord.

In Britain Drs. Balbirnie and Hannay have published memoirs on the subject.

The treatment by the solid Nitrate of Silver has been found of great benefit, not only in old gonorrhœal and leucorrhœal discharges, but also in acute recent gonorrhœa, before the inflammatory symptoms have been subdued.

The Nitrate of Silver, locally applied, is a most potent *antiphlogistic* !!! remedy. Dr. Johnson has witnessed numerous cases of *acute* gonorrhœa in females cured by two or three applications—the burning, uneasiness, and pain induced usually are only felt after the first applications.

Several reflections suggest themselves here—we first find that the acute inflammation caused by the application of Nitrate of Silver cures chronic inflammation. Next we find that the acute inflammation induced by Nitrate of Silver cures the acute inflammation of gonorrhœa. (11.)

Yet all acute inflammations are not identical, and there must be a difference between gonorrhœal and lunar caustic-inflammations, yet the latter is eminently *adhesive*, and we know that gonorrhœal inflammation is most apt to cause stricture, which is an adhesive inflammation, although as a rule inflammation of mucous membranes, is mucous or suppurative, rarely adhesive, while that of serous membranes is almost always adhesive, much more rarely suppurative. (11.)

Dr. Hannay, of Glasgow, has used lunar caustic locally in three hundred cases of gonorrhœa in women, and says he fearlessly gives it out as an infallible and safe remedy for this disease without any one drawback, but in the vain fear of persons of no experience, or of such as are determined to oppose it. (11.)

In *gonorrhœa of the female*, a solution of the Nitrate of Silver, or even this caustic in the solid state has been applied with the best effects. In many cases it arrests the discharge permanently in twenty-four hours. It often causes an increase of the discharge at first, but after a few repetitions it diminishes and is arrested (3.)

In *pruritus pudendi* Dr. A. J. Thompson states that in one very obstinate case, which resisted all other remedies, he found decided benefit from pencilling the parts once or twice daily with a solution. (44. 46.)

In *vaginitis*, it is our best remedy, if occasionally brought into contact with the interior surface of the vulvo-uterine canal, in suitable strength. In this manner we have several times cured distressing and obstinate cases of this malady. (10.)

In *amenorrhœa* Dr. Lubanski speaks highly of applying the Nitrate in substance, lightly, to the os uteri, at the time of the expected appearance of the menses. He states that in all cases, excepting where the amenorrhœa is symptomatic of some other disease, it proved effectual. It has also been found successful by Dr. Egan, who recommends its employment in obstinate cases. (44. 46.)

In a case of *menorrhagia* in a girl, aged 17 years, of supposed doubtful character, who was suffering for two weeks with profuse menstrual discharges, at times ceasing for a while and then again coming on suddenly and violently, accompanied by very severe pain in the uterine- and ovarian region, extending to the sacrum and thighs, Dr. Patzack ordered Argent.-nitr. 3d, one grain every 3d hour, and effected a cure in three days, (26.)

In the early stage of *cancer of the uterus* Dr. Ashwell states that he has derived much benefit from the application of Nitrate of Silver in solution, to be applied by means of a speculum, and states that he has found it particularly useful in those cases where the mucous membrane lining the channel of the cervix, or around the margin of the os uteri, has been red and tender, when there have been obvious ulcerations, or a tendency to softening. The character of the mucous membrane generally improves after three or four applications. (44. 46.)

In *ulceration of the os and cervix uteri*, the application of the solid Nitrate has been advised and practised by the highest obstetric authorities of the day. The real amount and character of the disease should in the first place be clearly ascertained by the speculum.

That the practice is not devoid of danger is shown by a case related by Dr. Williams of Swansea, in which in consequence of the inflammation caused by the application of the caustic, the edges of the os tincæ even so closely united as to require to be separated by an operation, to allow of the escape of the menses. (44. 46.)

It has been successfully applied to *ulcerations of the os and cervix uteri* by Marcy. In the N. Am. Jour. of Hom., Vol. 5, p. 94, he uses the following language. "In all cases of ulceration of the os and cervix uteri which resist treatment by internal remedies, and the other remedies which have been enumerated, we are in the habit of cauterizing the ulcers by Nitrate of Silver. These applications we repeat every five, six, or eight days, according to circumstances, until the ulcers assume a healthy appearance and the healing process seems satisfactory. Nor is it in ulcerations alone that Nitrate of Silver applications are homœopathic; for abrasions with destruction of the epithelium and granulations of the uterine os and cervix, may be produced by applications of the solid Nitrate in health, as well as cured by similar applications when they exist as morbid phenomena. (54.)

Chest and Air-Passages.—Suffocative cough for several days. Hoarseness, tickling, and roughness of the throat. Dry cough from tickling and irritation of the throat and larynx. Paroxysms of violent palpitation of the heart with faintish nausea. Aching, tensive pain in various parts of the chest. Nightly palpitation. (32.) Oppression of the chest. Quickened and difficult respiration. Laborious panting and whistling breathing. Gasping for breath, and paroxysms of suffocation. Blood-spitting. Burning in the chest. Violent pleuritic stitches in the chest, preventing respiration. (19. 26.)

It is said to be particularly remarkable in Orfila's experiments that it always caused a difficulty of respiration to the point of suffocation, and Vogt says, if we add to this, Wolff's observation, that it exhibits really specific powers against trembling and spasm of the heart, and recollect that Orfila never found it to excite vomiting or inflame the duodenum when injected into the veins, we are almost justified in drawing the conclusion, that it acts upon the *superior nervous ganglia and upon the glosso-pharyngeal nerve* in like manner as other metals

act upon the solar plexus. Even in ancient times it was advised against asthmatic affections and palpitations. (11.)

Clinical Remarks.—In *spasmodic asthma* the Nitrate of Silver given in the intermission will be found in many cases to reduce the force and frequency of the paroxysms. Dr. Waring has thus employed it with decided benefit. (44. 46.)

This remedy has been applied with apparent success in *pharyngitis* and *laryngitis* both *acute* and *chronic*, but particularly the follicular variety. Dr. Horace Green, of New-York, who has been the most strenuous advocate of this mode of medication, employed a solution of the crystallized Nitrate of the strength of from two to four scruples to a fluid ounce of distilled water, and makes the application by means of a probang or piece of curved whalebone, with a sponge attached to the end of it, as recommended by M. Trousseau. Before attempting to penetrate the glottis, he accustoms the membrane to the irritant impression by applying the solution daily, for several days to the parts immediately about the opening. When the sensibility of the lips of the glottis is thus somewhat blunted, he passes the sponge saturated with the solution through the rima-glottidis into the cavity of the larynx. He recommends that the patient on opening his mouth “should take a full inspiration and then breathe gently out,” at the moment in which the sponge is introduced. This is carried over the top of the epiglottis along the posterior surface of this cartilage, and then suddenly pressed downwards and forwards through the aperture. A momentary spasm of the glottis takes place, by which the sponge is compressed and the fluid forced out of it. The application should generally be made every other day for the first two weeks, after which it may be repeated, two or three times a week, till a cure is effected. Wood’s Pract., vol. 1, 3d ed. 1852, p. 786. (54.)

Mammæ.—Stitching pains in the breasts. Tenderness and enlargement of the breasts and axillary glands. (32.)

Clinical Remarks.—In *fissured or excoriated nipples* the application of the solid Nitrate of Silver is of great service. It should be insinuated into all the chaps and cracks, and the nipple afterwards washed with tepid milk and water. (3.) The nipple should be first carefully dried, before the Nitrate is applied, the pain caused by it soon disappears, and a few dressings of Zinc-ointment will complete the cure. It is said to be very effectual. (44. 46.)

Heart.—Irregular action of the heart; palpitations. Violent palpitation of the heart with nausea. Nightly palpitation. Stinging itching of various parts of the body, most violent around the left nipple.

Clinical Remarks.—Nitrate of Silver, Zinc, Cuprum, Nux, Ignatia, &c. are more or less homœopathic to epilepsy of the heart. In this disorder, according to Wunderlich, there is a sense of spasm or cramp about the heart; the pulse and heart intermit for four or six beats; the expression of the patient is as if something frightful had happened to him; he is speech- and motionless; he has internal anxiety and

oppression of the chest, and a violent pain extending from the heart up the neck into the head, with more or less stiffness of the neck; the patient describes these daily pains and the inexpressible anxiety as indescribably dreadful; when the attack passes over there is some rapid-action of the heart, for a little while. (11.)

Superior Extremities.—Painless, light red swelling about the wrist joint, extending towards the middle of the forearm.

Clinical Remarks.—In removing warts it is also very effectual; it may be repeated once or twice a week until their removal is effected. (44. 46.)

In *onychia*, a resolution of the disease has appeared to follow blackening the diseased portion with the Nitrate in substance or solution. Mr. Liston indeed regards it almost as a specific. (44. 46.)

Lower Extremities.—Paralytic heaviness and debility of the lower limbs, so that she did not know where to put them. Rigidity in the calves, with great debility and exhaustion, as from fatigue, scarcely permitting her to walk across the room. Great debility and weariness in the calves as after a long journey. Neuralgic pains in the hips, thighs and knees. (32.)

Clinical Remarks.—To corns the local application of the solid Nitrate is advised by Mr. Higginbottom. The corns should be first soaked in hot water, and pared down. The Nitrate should be lightly passed over the surface, and repeated every ten or twelve days until the corn is destroyed. (44. 46.)

ARNICA-MONTANA.

MOUNTAIN ARNICA. GERMAN LEOPARD'S-BANE.

Mountain Tobacco. Ptarmica Montana. Panacea-Lapso-rum. Wohlverleih. Fall-Kraut.

AUTHORITIES.

Hahnemann. (1.) Noack and Trinks. (19.) Jahr. (32.) Hempel on the use of Arnica. (80.) Hirschel's Archiv. (81.) Ruckert's Clinique. (64.) Peters. (11.) Fullgraff. (26.) Snelling. (46.) Dierbach's Mat. Med. (6.) Sobernheim's Mat. Med. (57.) Vogt's Mat. Med. (20.) Hamilton's Flora Homœopathica. (50.) Teste's Mat. Med. (36.) Inman on Muscular Affections, mistaken for Spinal Irritation. (58.)

GENERAL REMARKS.

The Arnica-Montana is a species of the genus Arnica, family of the Radiata, class syugenesia polygamia superflux. It was first correctly described by Tabernæ Montanus, a naturalist of the 16th century. It grows on the high mountains of the south of Europe, and in the plains of the north of France, where some varieties of it exist,

distinguished by the large size of its leaves, the height of the stems, &c. (36.) It is a perennial, herbaceous plant, having a woody brownish, horizontal root, ending abruptly, and sending forth numerous slender fibres of the same color. The stem is about a foot high, cylindrical, striated, hairy, and terminating in one, two, or three peduncles, each bearing a flower. The radical leaves are ovate, entire, ciliated and obtuse; those of the stems, which usually consist of two opposite pairs, are lance-shaped. Both are of a bright green color, and somewhat pubescent on their upper surface. The flowers are very large, and of a fine yellow orange color. The calix is greenish, imbricated, with lanceolate scales. The ray consists of about fourteen ligulate florets, twice as long as the calyx, striated, three toothed, and hairy at the base; the disc of tubular florets, with a five lobed margin. (36.)

It is also found, according to Nuttall, in the northern regions of North America, west of the Mississippi. It has been introduced into England, and might, no doubt, be cultivated in this country. Water extracts its virtues. A bitter principle has been extracted from the flowers, which has been considered to be identical with that discovered in the seeds of the *Cytisus-Laburnum*, and hence named *Cytisin*. It is yellow, bitter, nauseous, deliquescent, soluble in water and *diluted* Alcohol; insoluble in ether. It is powerfully emetic and cathartic, and is supposed to be the active principle of the plant. (7. 46.)

Wood and Bache say that Leopard's-Bane is a stimulant, directed with peculiar energy to the brain and whole nervous system, as manifested by the headache, spasmodic contractions of the limbs, and difficulty of respiration, which result from its use. It acts also as an irritant to the stomach and bowels. It is much used by the Germans, who give the root and flowers with advantage in amaurosis, paralysis, and other nervous affections. They say that it proves serviceable in that disordered condition which succeeds concussion of the brain from falls, blows, &c., and from this circumstance has received the name of *panacea lapsorum*. It has also been recommended in *intermittent fever*, *dysentery*, *diarrhœa*, *nephritis*, *gout*, *rheumatism*, *dropsy*, *chlorosis*, and various other complaints. It seems to be peculiarly useful in diseases attended with a debilitated or typhoid state of the system, to which it is adapted by its stimulating properties. The powdered flowers and leaves are sometimes used as a sternutatory, and the inhabitants of Savoy and the Vosges are said to substitute them for tobacco. (7. 46.)

Notwithstanding the acrid and bitter taste of this plant, it does not, according to Linné exercise any deleterious action on herbivorous animals. Oxen and goats, he says, eat it with pleasure. (36.)

The Arnica of Bohemia was the one which was formerly the most valued. It was prescribed in the form of infusions, decoctions, and locally. The root, stem, and blossoms were successively given a preference by physicians, who, however, gave up the root for the reason that it rapidly loses its taste and aroma by drying. It is this root, but fresh, which is used for Homeopathic preparations. (36.)

For a long time popular empiricism had availed itself of the properties of Arnica, when a Belgian physician, Fehrius or Fehr, drew the attention of his colleagues to this plant. The facts published by him tended to show that the Arnica, whether used internally or externally, was a specific remedy for *sanguineous effusions, sugillations, ecchymosis, &c.* A large number of German, Swedish and French practitioners confirmed Fehr's observations, and its use soon became quite extensive. According to Murray, it was successfully used against the following maladies: *external lesions, such as are caused by a blow or a fall, or contusion; a certain form of fall pleurisy; cachexia; œdema; atrophy; traumatic peripneumonia; suppression of the menses, or lochia; uterine hæmorrhage; calculous nephritis; gout; muscular contractions; gangrene; jaundice produced by contusions; paraplegia; hemiplegia; paralysis of the bladder; amaurosis, caused by a cerebral affection.* (36. 46.)

Stoll used it with success in certain forms of dysentery, especially in epidemic dysentery, and also cured with it several cases of intermittent fever, a circumstance which induced him to term it the Quinine of the poor, a designation which, however, it does not seem to deserve. (36. 46.)

More recently it has been lauded as a remedy for *spasms, convulsions, tetanus, convulsive cough, trembling, and even for the itch*; but this last is not to be relied on. Murray mentions the accidents which it is capable of producing in over-doses, to be vomiting, anxiety, sweats, an aggravation of pain around injured parts, which, however, never lasted long, sensitiveness of the abdomen, weakness of the senses and nerves, tingling, lancing and burning pains, or shocks resembling those produced by the electric fluid. (36. 46.)

Homœopathically, the sphere of Arnica comprises, *all traumatic lesions, (contusions, cut or torn wounds,) with their immediate consequences, (internal or external hæmorrhages, fractures, luxations, sprains, traumatic fever, syncope, tetanus, paralysis, pneumonia, hepatitis, &c.,) or their remote consequences, (partial emaciation, neuralgia, intermittent fevers, &c.)* (36. 46.)

It is particularly adapted to sanguine-plethoric persons, with lively complexions, and disposed to cerebral congestions. It acts but feebly on persons who are partially debilitated, with impoverished blood and soft flesh. It acts principally on the muscles and cellular tissue. The boil is the one of all cutaneous affections to which it is most adapted. Hence again it is more adapted to the treatment of phlegmonous erysipelas and deep burns, than to that of simple erysipelas and superficial burns. (36. 46.)

From the fact that Arnica frequently cures acne and boils independent of any traumatic cause, it probably cures internal maladies which emanate from their retrocession.

CASE.—A man thirty years of age, of a sanguine temperament, was subject to a constant succession of boils, constituting a veritable diathesis. For months they occupied the face, neck and shoulders.

Afterwards they disappeared, to give place to an intense angina. This process had been going on for several years. Arnica was prescribed, which arrested the throat disease in a few days, and the boils which had disappeared when this disease set in, have not returned. (36. 46.)

Much success has been obtained with the Arnica in the homœopathic treatment of gout, especially of the foot; also idiopathic rheumatism, and of certain kinds of neuralgia, characterized by the cutting, tearing, or wrenching character of the pains. (36. 46.)

EXPERIMENTS ON THE HEALTHY.

1. *With the Flowers.*

1. Dr. Assmann took an infusion of seven grains of the *flowers* in two ounces of water; he experienced a decided scratching sensation in the mouth and œsophagus, and soon afterwards a contracting pain in the stomach, lasting one hour, and then gradually subsiding; then a sense of confusion in the head set in, attended with dull pressing pains below the parietal bones and in the region of the lachrymal fossæ, which only subsided after the occurrence of perspiration in the night; on the next day he experienced general lassitude, heaviness of the head, and inability to work continuously or earnestly. (4. 11.)

Five days after, he took twenty-two grains infused in four ounces of water, and experienced in addition to all the above sensations, also diarrhœic stools, with some cutting pains in the bowels. (4. 11.)

Clinical Remarks.—It is homœopathic to some irritations of the throat and stomach, with tendency to cramps in the stomach, followed by confusion and pains in the head, relieved by perspiration and followed by lassitude and heaviness of the head, as if after a debauch. It promises to prove useful in some dyspeptic and bilious headaches, especially when followed by colic and diarrhœa; also in some bilious diarrhœas. (11.)

2. Dr. Engler took seven grains in four ounces of water; in an hour his pulse was quickened and irregular; his sleep was restless and disturbed by dreams. Two days after he took the same dose with the same results, but preceded by a scraping sensation in the mouth, about the root of the tongue, and in the œsophagus, lasting for half an hour. Fifteen grains in eight ounces of water, produced the same sensations; fifteen grains in four ounces of water were followed immediately by burning and scraping in the mouth and œsophagus, frequent eructations, and irregular pulse in the evening; the following night was disturbed, and on the next morning he had a *peculiar painful sensation down the spine*, as if produced by long-continued stooping. A repetition of the same dose produced the same scraping in the throat, followed by aching, but superficial pain between the shoulders; his night was restless. The same dose on the next day was followed by less irritation in the throat, while the dull aching muscular or tendinous pains were located more under the right shoulder-blade; the

pulse was quick and irregular. The same results followed twenty-grain doses, two and five days afterwards. Thirty grains two days later, produced very violent scraping in the throat, followed in ten minutes by an aching pain apparently in the posterior wall of the stomach, and extending between the shoulder-blades into the dorsal vertebræ.

During these experiments he expectorated much bright, transparent, glassy mucus, punctated with black spots, and his stools seemed harder and less frequent. (4. 11.)

Clinical Remarks.—It promises to be useful in some irritations in the throat, œsophagus and stomach; in flatulent affections and irregularity of the pulse from derangement of the stomach. Its peculiar action upon the muscles and tendons begin to become evident in these experiments, especially about the spine and shoulders. It deserves attention in sleeplessness and dreaminess at night when arising from derangement of the stomach, and attended with quickness and irregularity of the pulse, more or less stomach- or throat-cough, and some constipation. (11.)

3. Dr. Heisterbugk took fifteen grains in eight ounces of lukewarm water, followed in ten minutes by a gradually increasing pain in the stomach, *as if all the walls of the stomach were spasmodically contracted*; it lasted an hour, and was then relieved by eating. He also noticed increased activity of the skin, and a pricking pain in the chest and internal surfaces of the arms, such as occurs after a sudden overheating; pulse 75 to 80. Four days after he took the same dose with slighter results and no pricking; fifteen grains in four ounces, only produced a slight sensation in the stomach; the same dose two days after, produced in a few minutes a considerable distention of the abdomen, lasting for one hour; the same dose two days after, produced the same bloating of the abdomen, followed by moderate heaviness and confusion of the head, lasting for two hours; thirty and forty grains in six ounces of water, only re-produced the swelling of the abdomen and confusion of the head. (4. 11.)

Clinical Remarks.—In these experiments there was a decided tendency to cramps of the stomach, to an unusual development of flatulence in the bowels, attended with confusion of the head and irritation of the skin. (11.)

4. Dr. Kneschke took seven grains in four ounces, and eleven grains in six ounces of water, without any result; but fifteen grains produced in half an hour a peculiar scraping and burning in the throat and œsophagus, followed in a few minutes by a troublesome aching in the stomach, lasting for a full hour. Three repetitions of the same dose only produced the same results; but twenty-two grains in four ounces of water, caused scraping in the throat immediately, and violent aching in the stomach lasting for one hour; he had a good night, but awoke with violent piercing pains in the forehead and occiput, lasting the whole day, attended with loss of appetite, constipation, and dejection of spirits; he only recovered on the fifth day. Another

experiment with the same dose was followed by scraping in the throat for half an hour only, but considerable aching in the stomach for two hours, attended in first hour with piercing pains in the forehead and temples, followed by dejection of spirits and loss of appetite; he slept good, and awoke well. (4. 11.)

Clinical Remarks.—The irritant action of Arnica upon the throat and stomach is well-marked in the above experiments, and its homœopathic relation to headache and lowness of spirits such as attend derangement of the stomach, becomes evident. (11.)

5. Dr. Stræfer experienced burning scraping in the throat, and some nausea, from seven grains; also increased secretion of saliva, and boring unpleasant movements in the stomach, followed by aching in the forehead for two hours; twenty-two grains in four ounces of water, caused the above effects in a much more violent degree, especially increased secretion of saliva, nausea with vomiting, congestion to the head and pain in the forehead. In all these experiments the pulse became fuller and quicker. (4. 11.)

Clinical Remarks.—From the above, Arnica seems to act as a simple irritant and stimulant, with special action upon the head and stomach. (11.)

6. Dr. Winkler took fifteen grains in four ounces, followed immediately by violent burning in the throat, gradually descending the œsophagus to the stomach, lasting for three-fourths of an hour, and followed by griping and aching in the stomach, extending into the small bowels with much commotion and many contractions of them, followed by an almost tympanitic distention of the abdomen; at the end of two hours almost all these effects had passed away, but there was a sensation of gnawing canine hunger, without the least appetite; he awoke the next morning with violent headache, lasting for four hours, and so severe at 8 o'clock, that he almost fell down from pain and vertigo; nausea and relaxation lasted till noon. Seven grains in two ounces of water, caused scraping in the throat and œsophagus, with the sensation as if the walls of the pharynx were swollen, lasting only one-fourth of an hour, and followed by heaviness and aching in the stomach for half an hour. Like effects were produced by twenty-two grain doses, in six and four ounces of water. Afterwards he took three, five, seven, ten, fifteen, and twenty grain doses, in from two to four ounces of water; the smaller doses produced effects almost equally great with the larger ones. (4. 11.)

The taste of these infusions was peculiar, and caused a peculiar slight burning or scraping biting in the throat, which extended down into the stomach, somewhat resembling that of heartburn, and lasting from a quarter to half an hour; eructations soon occurred, with and without the taste of the remedy; after the burning in the throat passed away, much saliva collected in the mouth, and there arose an inclination to vomit without nausea, attended with a feeling as if the pharynx were swollen and would prevent swallowing. These three symptoms sometimes disappear singly or collectively in the course of half an

hour, but may last longer than this, and return again after they have once ceased. About an hour after taking the remedy, a *spasmodic contraction of the stomach* begins, generally attended with pain, but the major part of the pain seems to be in the *posterior* wall of the stomach; the sensation is as if the posterior wall of the stomach was pressed with great force against the dorsal vertebræ, and that thus pain was also produced in the spine itself, both upwards and downwards from the region of the stomach. In the course of two or three hours slight cuttings are felt in the small bowels, followed in one-half or whole hour more by distention and bloating of the bowels, with frequent *urging* to stool, and discharge of either liquid stools, or only of a little tough *fæces* with much wind. (4. 11.)

Aching in the head, confusion of the same, and very frequently *one-sided rheumatic headache* with vertigo, are among the last of the uncomfortable effects of this drug, and often last from one to three or five hours.

Frequently the *cramps in the stomach* change in the course of one, two or three hours into a *painful bulimia*, in which, however, both appetite and digestion are much impaired.

The distention of the abdomen and *dysenteric* urging to stool often lasted for twenty-four hours, although gradually diminishing.

Quickness of the pulse and perspiration occurred most frequently when the infusions were taken warm.

Clinical Remarks.—Arnica seems to act more specifically upon the muscular coat of the throat, œsophagus, stomach and bowels, than upon the other parts, although it acts as an irritant upon them all. It would seem to exert a somewhat specific action upon the *solar plexus*, at least those pains which it produces apparently in the posterior wall of the stomach and about the spine, are similar to pains in this important collection of nerves. (11.)

7. Eleven other experimenters experienced from similar doses: Scraping in the throat, profuse secretion of thin saliva, nausea, spasmodic pains in the stomach lasting for two hours, pain in the forehead for one hour, colic pains from time to time, more or less profuse *bleeding from the nose*; or burning in the throat and nauseous scraping, fullness and aching in the stomach, with slight burning in the upper part, and loss of appetite, followed the next day by dullness of the head, with evident aching in the *right* half of it, especially over the *right eye-brow*; *increased secretion of saturated urine*; or fullness and aching in the stomach without actual pain, loss of appetite, followed by annoying aching pain in the *right* half of the occiput, extending in the course of three hours to the *right* half of the forehead, and only ceasing towards evening; or severe burning and scraping in the throat, with shuddering, inclination to vomit, feeling of fullness and aching in the stomach, and long-continued nausea and inclination to vomit; or warmth over the whole body and breaking out of a warm sweat, with inability to do anything from nausea, pains in stomach and bowels, and confusion of head, with fullness and quickness of the

pulse, followed suddenly in two hours by violent urging to stool, with scanty and natural fæces, as if the muscular coat only of the bowels had been excited; frequent eructations, or pricking and biting at the root of the tongue; burning in the œsophagus, frequent eructations, violent pains in the *posterior wall of the stomach*, seeming to extend to the spine; *cramp like pains* in the stomach, and colic pains in the bowels, both lasting for more than two hours and attended with the sensation *as if the stomach were overloaded*, although nothing had been eaten; as the cramps in the bowels lessened, the whole abdomen became swollen with frequent discharges of urine and urging to stool; followed by aching pain especially in the *right* half of the vertex, and more easy expectoration of bronchial and pulmonary mucus. A lady experienced from two-grain doses, burning and scraping in the throat and œsophagus, gradually extending down to the stomach, followed by eructations and pain in the stomach, troublesome mixture of qualmishness and nausea, with anxious aching in the stomach and loss of appetite, lasting the whole day, followed in the afternoon by distention of the abdomen and not painful pressing in the head, with restless sleep at night from anxious dreams, and remains of throat affection and nausea the next day. (4. 11.)

A young lady experienced from one and one-fourth grains, scraping in the throat, qualmishness and nausea, violent pain in the stomach lasting all the afternoon, waking her up at times at night and continuing somewhat the next day; (she had never suffered from a like affection;) distention of the abdomen, loss of appetite, headache almost constantly for five hours, sometimes more in the forehead, at others in the occiput; or such pressing pain in the forehead, that she would have fallen if she had not laid down. (4. 11.)

From table-spoonful doses every two hours, for thirteen doses, of an infusion of one drachm of the flowers in six ounces of water, the aching in the stomach became permanent, and increased to severe pain like *cramp in the stomach*, with loss of appetite, frequent eructations, some tension of the abdomen, depression of spirits from aching pain in the head, especially in the forehead; natural stools, and restless sleep. (4. 11.) Cramps in the stomach and loss of appetite were among the most constant of the symptoms from frequently repeated small doses, with frequent discharge of natural urine.

Clinical Remarks.—The most singular result of these experiments to the homœopathist, is the entire absence of all those specific actions upon the absorbent, muscular and fibrous systems which he is inclined to expect. The irritant action upon the throat and stomach are again corroborated; also the *specific* action upon the *right* side of the head and brain, the tendency to bleed from the nose, and outbreak of perspiration; also the proclivity to dysenteric affections, and the *specific* action upon the posterior wall of the stomach, and upon the spine; it promises to be useful in many cases where there is a sense as if the stomach were overloaded, although nothing has been eaten, in flatulency, tympanitic distention of the abdomen. (4. 11.)

2. With the Root.

The Tincture of the Root, one part to six of Alcohol, has been taken in doses of from six to thirty-six drops, and even forty or fifty drops, with little or no effect; sometimes eructations were caused, also a little confusion of the head and more frequent discharge of flatulence. In one experimenter, however, six drops excited sympathetic distention of the abdomen, cutting pains in the bowels and discharge of much offensive flatulence without relief; seventy-two drops caused a feeling as if the zyphoid process were pressed violently inwards, with piercing pain under the sternum, vertigo, aching pain in the temporal bones and orbits, palpitation of the heart, and quickness of the pulse, disturbing sleep at night; the bowels were rather constipated, the sense of hunger increased, but the appetite considerably lessened. (4. 11.)

An infusion of the root caused slight *periodical* aching in the region of the cardiac orifice, and *periodical* aching pain in the right hypochondriac region, apparently in the liver, or duodenum; other experiments caused pain in the stomach and œsophagus, with tendency to drowsiness, entire loss of appetite and dullness of the head, and general lassitude; or fullness of the stomach, distention of the abdomen, frequent discharge of flatulence and urging to stool, with tendency to constipation; also *violent pains*, like those caused by suddenly getting up, or from long-continued stooping, extending along the whole of the dorsal vertebræ, not seated in the muscles of the back, but rather arising from violent contraction of the diaphragm or of the stomach, which might have been forced violently against the spine; two hours afterwards, this pain concentrated in the upper part of the dorsal vertebræ, between the shoulders, as is the case in *violent cramps of the stomach*; in other experiments *the stomach itself* was distinctly felt to contract violently and spasmodically. (4. 11.)

In females, it produced a feeling of emptiness in the stomach and canine hunger, but attended with entire loss of appetite and a certain amount of disgust for all food, also, aching pain in the forehead; stomach-ache, which recurred at intervals, with an unpleasant sensation of repletion, although the stomach was empty, and some acidity in the mouth.

The following case is very illustrative of many of the pathogenetic effects of Arnica. The patient thus describes the commencement of his sufferings. He had been making an *Opodeldoc* of Arnica. (12. 26.)

"I went to bed languid and exhausted; my sleep was much disturbed, and I awoke six or seven times, each time dreaming that I was dying, and that my bed was surrounded by my friends, assembled to take their last leave of me. On the following day I had intense headache, which was accompanied with a feeling of great weight and heaviness in the eyes, and a sensation of oppression and drooping in the eye-lids, as if they could not be raised. The left wrist was powerless for half an hour, with the feeling generally that I could not use my arms. I had the sensation of an oppressive weight at the upper

part of the chest, with a feeling of constriction in the throat. In walking I was feeble, as if I had been suddenly blighted with old age, this was on the second day. (12. 46.)

"My subsequent sensations were, a want of power in both ankles, with a feeling of a heavy weight on each instep. There was in my throat as it were, the sound of a subdued whistle. There was a feeling at the upper part of my head as though the brain was sore or tender. There was a total want of appetite for two days, during which time I loathed the very sight of food. I suffered from a constant dry cough, which shook the whole frame. I felt as if I was bruised over the whole body. The testes felt hard, and there was swelling and tenderness in them. The thighs were of livid color, with blue and yellowish marks, presenting the appearance of a 'black and blue' eye, as it is called. There was also a sensation of a great weight across the lower part of the loins, and a feeling of being drawn in, as if a cord were bound tightly across."

"During the first two or three days, there were ever and anon, a few patches on the face, and especially the forehead, disappearing and recurring, which resembled the Arnica rash, with dullness and pain in the head; repugnance to food, which lasted during the whole illness; eructations; pains in the limbs, as from a bruise; loss of strength, and of all sense of health; the sensation of being good for nothing; some coryza." (12. 46.)

After a few days, the larynx and trachea became affected. He had a dry, short, and hacking cough. The chest then became affected; he had pains over the thorax, stitches with cough, which increased the pain; aching pains of the chest; a great deal of hypochondriacal anxiety; there was great tightness of the chest, with difficulty of respiration.

He had been suffering with this progress of Arnica symptoms about a fortnight, when he was one night overtaken with great cardiac distress; stitches in the cardiac region; faintness; feeble, hurried, and variable pulse; irregular rhythm of the heart; the horror of instant death.

Aconite and Ars. were given to him. In a week after he went for a few days into the country, but it was fully a month from the commencement of his sufferings from Arnica, before he was delivered from this medicinal disease.

The effects on the mind and disposition were no less remarkable than those on the body. He is naturally cheerful, kindly and genial; throughout this arnicated perturbation of his system, he was downcast, waspish and peevish. (12. 46.)

THEORETICAL OPINIONS.

Dierbach says that its effects are very characteristic, and that its action upon the skin is the most marked, the functions of which it can arouse from the most torpid state; the outbreak of perspiration which sometimes assumes a red color on the chest, is one of the most constant symptoms. (11.)

Not unfrequently one notices a feeling of formication, and a prickling piercing spasmodic sensation, which has been compared to slight electric shocks; in large doses it sometimes produces a sensation of coldness over the whole surface of the body. (11.)

The primæ viæ are soon attacked by Arnica, and eructations, stomach-ache, retching, nausea, vomiting, colic, tenesmus, at times diarrhœa, but more frequently constipation, increased flow of urine, and a painful itching of the genitals, have often been noticed. (11.)

Its influence upon the organs of the chest is marked by anxiety, oppression, palpitation of the heart, and dry irritative cough.

It often excites headache, attended with dizziness; the smell of the flowers is apt to excite sneezing, whence the name of the plant, which is properly *Ptarmica*.

It is generally believed to possess the power of absorbing blood which has exhaled from the blood-vessels (ecchymosis,) and is then apt to cause pain in the injured part.

The pains produced by Arnica are said to be far less severe if the patient moves about his room, than when he lies in bed.

Clinical Remarks.—From the above effects of Arnica, it would seem homœopathic to profuse perspiration, and to some diseases attended with this symptom; also to numbness, prickings and jerkings, such as precede apoplexy, or attend paralysis; to disorders attended with great chilliness of the whole body, such as fever and ague, the chills of hectic fever, influenza, debility, &c.; to many dyspeptic derangements of the stomach, to colic, spasms of the stomach, tenesmus, dysentery, occasionally to diarrhœa, but more frequently to constipation; to profuse urination, and perhaps diabetes; to prurigo and itching of the genitals; to congestion of the chest, dry irritating cough, and palpitation of the heart; to headache, attended with vertigo; catarrh of the head, &c. (11.)

According to Dierbach, it has been found useful in the dominant school in nervous, mucous and putrid fevers, and malignant intermittents; in extravasations from external injuries, in chronic inflammations of the chest which have arisen from violent blows or falls, in concussion and softening of the brain, paralysis, clonic cramps, epilepsy, &c.; also in dysentery and chronic diarrhœas, chronic hæmorrhages. in gout, rheumatism, dropsy and cholera. (11.)

According to Vogt, it is an acrid, æthereal-oily, or exciting remedy which in small doses acts specifically upon the vegetative side of the nervous system, and upon the motor functions; he would describe more exactly the sphere of its action by saying, that it is at those points where the nerves and arteries lose themselves in the organic structures, and where the veins and lymphatics arise, viz., in the capillary vascular system, especially that of the membranous structures, viz., the external skin, the fibrous membranes, the tendons and sheaths of the muscles, the ligaments of the joints, the periosteum, serous and synovial membranes, the pleura, peritoneum, &c. In these parts, in virtue of its exciting or acrid powers, in combination with its æthereal-

oily properties, it excites the actions of the nerves and vessels, hastens the natural metamorphoses of the tissues, or arouses them from torpor and inactivity, or retains them in a certain stage of organic vitality when they tend towards colliquation or putrescency. (11.)

Given in larger doses, it either affects the stomach especially, and causes scraping in the throat, burning extending down to the epigastrium, *spasmodic painful contraction* of the stomach, with flow of much saliva into the mouth, unpleasant sensation of nausea, cardialgia, eructations, retchings, vomiting, followed by colic or diarrhœa; or it may affect the whole organism, especially the brain and spinal marrow, and excite vertigo, stupefaction, confusion of the head, flimmering before the eyes, noises in the ears, anxiety, timidity, oppression at the præcordia, inability to stand up, followed by increased pulsation of the arteries, *violent congestions of blood towards the terminal branches of all the blood vessels*, especially to the head, chest and abdomen, attended with palpitations of the heart, pulsations in the epigastrium, greater development of heat, and irritation of all the tissues, marked by formication, prickling, piercing, trembling, subsultus, &c.; finally the secretions are stimulated, especially those of the skin, mucous membranes and kidneys, which not unfrequently are attended with hæmorrhages. (11.)

Clinical Remarks.—From the above we conclude that Arnica is homœopathic to active hæmorrhages from the capillary vessels, especially of the skin, mucous membranes and kidneys; to *active congestive and paralytic affections*, when attended with palpitations, pulsations, formication, pricklings, tremblings, and subsultus; to *active congestions of the head* and threatenings of apoplexy, when there is dizziness, dullness and confusion of the brain, flickering before the eyes, noises in the ears, anxiety, and inability to remain upright; to *active congestions and cramps of the stomach*, dyspepsia, colic, &c.

In the dominant school it is regarded as indicated in *asthenic affections*, in atony, debility and inclination to paralysis, especially in the metamorphoses of the tissues, and also when there is a tendency to decomposition or dissolution, to putrescency or colliquative discharges. (11.)

In *asthenic fevers* it has generally been regarded as indicated in the old school, when there was a *torpid, stupid and paralytic* condition, marked by indifference, dejection of spirits, drowsiness, with dull unsympathetic look, or in the highest degrees of sopor, even of stupor, and when there are similar signs of a depressed, sunken, inactive and torpid nervous reaction, approaching to paralysis. But Arnica is apt to produce drowsiness, anxiety, timidity, dejection of spirits, lassitude, dizziness, &c. (11.)

It has been strongly recommended in true *typhus* fever in the nervous stage, when there were nervous symptoms of a stupid or paralytic kind, coupled with a tendency to putrid decomposition; its powerfully exciting but not heating and stimulating action upon the nerves, and its invigorating action upon the venous system are supposed to render it peculiarly

useful in these cases, especially when bluish or brownish petechiæ are present, with a peculiar state of oppression or inactivity of the vascular system, and a torpid state of the nerves; also when metastatic abscesses occur, or patches of ulceration or gangrene, and when the skin is sodden, cool and sticky; in some cases of scarlet fever, measles, or small-pox, when attended with similar symptoms, it has also been found useful.

It is also thought to be indicated in asthenic affections of the alimentary canal, such as gastric-nervous fevers, nervous-mucous and bilious fevers; in nervous fevers attended with colliquative diarrhœa; in typhous-bilious-putrid dysenteries, &c.

In asthenic affections of the pulmonary mucous membranes, such as nervous catarrhal fevers. (11.)

ON THE NERVOUS SYSTEM.

On the Nerves of Motion.—Arnica is supposed to act more specifically upon the nerves of motion than upon those of sensation, at least Dr. A. T. Thompson is of opinion that Igasaures of Strychnia, or Brucia, exists in the plant, and empirically it has been found useful against some affections of the motor nerves, such as paralysis. (11.)

Clinical Remarks.—According to Vogt, it has been recommended more especially against such paralyses of the limbs and internal organs which remain after concussions or injuries, particularly after concussion of the brain or spine; it is also very useful in other paralyses which arise from a metastasis of an originally vegetative disorder, and in the latter stages of paralysis when connected with apoplexy. It is much more useful and safe in paralysis which is connected with the extravasation of blood in or upon the brain, spine, or other nerves, than Nux or Strychnine, for it promotes absorption while it gently stimulates the nerves, whereas Nux merely irritates the nerves. (11.)

ON THE VASCULAR SYSTEM.

On the Blood.—It is not known exactly what is the alteration of the blood produced by Arnica; as it is apt to produce hæmorrhages, some suppose that it lessens the quantity of fibrin and thins the blood. It has been known to produce hæmorrhages from the nose, kidneys and skin; whether these were caused by irritation and congestion, or from simple extravasation, remains for others to decide. (11.)

Hæmorrhages.—It has been known to produce more or less profuse bleeding from the nose; Vogt says it excites the secretions of the skin, mucous membranes and kidneys, which are not unfrequently attended with hæmorrhages; Dierbach says the perspiration excited by Arnica, sometimes assumes a reddish color upon the chest. (11.)

Clinical Remarks.—According to Hahnemann, 250 years ago, a physician named Fehr first made known to the profession the virtues of Arnica against *extravasation of blood* produced by falls, blows, &c., although it had long before been used in domestic practice, and hence received the name of *Panacea-lapsorum*. Vogt says that it is much relied upon in bruises and concussions, and the consequent extravasa-

tions of blood and suggillations, whence it has received the common name of *Fall-herb*. Dierbach says that Tabernæmontanus, physician to one of the ancient Electors of Saxony, informs us that it was a common practice among the Saxons to use this remedy against the consequences of severe falls or blows, or when they had injured themselves while at work; he also adds that it was a favorite domestic remedy in Dantzic, in Prussia, against injuries, but as the plant did not grow there, it was imported in casks from Lower Saxony. (11.)

In *passive hæmorrhages*, especially in putrid or scorbutic effusions of blood, Vogt says that Arnica often affords excellent results, viz., in morbus maculosus Werlhofii, and passive metrorrhagia. Sobernheim also recommends it in passive or paralytic hæmorrhages, such as arise from a debilitated or paralytic condition of the capillaries, especially in scorbutic, septic and petechial hæmorrhages. Also against extravasation of blood, or sero-lymphatic effusions caused by violent contusions, falls, or concussions; it may also be regarded as the main remedy in concussions of the brain and spine. Vogt also recommends it against *suppressed hæmorrhages*, such as suppression of the menses, hæmorrhoidal flux, or lochia; also against profuse abnormal hæmorrhages, such as bloody perspiration, bloody flux, &c. (11.)

Frank says that it promotes the absorption of blood when it has been extravasated, by some unknown process, but one which has been substantiated by experience in thousands and thousands of cases. (11.)

On the Heart and Arteries.—It has rendered the pulse quick and irregular; also fuller and quicker; quickness of the pulse and perspiration; an infusion of the root has caused *palpitation* of the heart and quickness of the pulse, disturbing sleep at night.

CASE 1.—A sensitive but healthy man took six grains of Pulv. Rad. Arnicæ against influenza and headache; in former times he had taken sixteen and eighteen grains with impunity, but in eight minutes he was seized with such *violent palpitations*, that he could scarcely speak a word; his look was fixed and anxious, he had general *coldness* of the body and very violent vertigo, with anxiety and stupefaction; his jaw fell down. Wine-vinegar relieved him in half an hour. (4. 11.)

On the Veins.—The exact action of Arnica upon the venous system is supposed to be that of simple increase of absorption, as is seen in the rapid manner in which it removes extravasations of blood, and effusions of serum, such as occur after falls, blows, &c.

On the Capillaries.—Arnica is supposed to exert a specific action upon the capillary blood-vessels; but the capillaries may be divided into those of secretion, and those of nutrition; it is more particularly upon the *capillaries of secretion* which this remedy is conjectured to develop its peculiar action; hence it is supposed to be more useful in hæmorrhages, perspirations, mucous fluxes, dropsical effusions, &c., than in hypertrophies of different tissues and organs. As the capillaries must be regarded as tubular continuations of the arteries, and the

commencement of the veins, Arnica must be suited to arterio-venous congestions and inflammations, and perhaps to veno-arterial or typhoidal disorders; it is also decidedly homœopathic to irregular distribution of the capillary circulation in which some parts are very pale and cold, and others too red and hot. (11.)

Fever.—Great internal heat, *hands and feet being cold*, accompanied by chills over the whole body. Dry heat while in bed, with violent thirst; heat becomes intolerable to him; he tries to uncover himself, but he *feels chilly upon doing so*, or even when making the slightest motion in bed. When lying for some time without stirring, he feels hot, especially about the head; he is obliged to shift its position constantly. A violent shivering through him when gaping. Several transitory sweats over the whole body at night, accompanied by anguish. Nightly sour sweats. Nightly thirst. Chilliness mostly in the evening. Fever early in the morning; first, chilliness, afterwards attack of heat. Shaking chills without any thirst. Orgasm of the blood in the evening, accompanied by dizziness of the head; he feels pulsations in the whole body. (1. 26.)

Clinical Remarks.—In *fever and ague*: a tedious *tertian fever* was finally checked with Bark and Mercury, but relapsed in three weeks; was again stayed by Bark, but returned in six weeks as a *quartan*; now an infusion of one ounce of Arnica flowers in two pounds of water, was given in divided doses; at first anxiety and violent cramps about the præcordia were caused, as has often been noticed, but ceased after the third or fourth dose; the patient only had one slight attack of fever and ague, and did not relapse after using the Arnica for three weeks. (4. 11.)

CASE 2.—A simple *tertian* which had lasted four months, was treated with an infusion of ʒj. of Flor. Arnicæ in six ounces of water, to be drank gradually before the expected paroxysm; the patient was attacked with dimness of sight, and had the hardest paroxysm she had had for a long time; a stronger dose, before the next attack, produced considerable dimness of vision, vertigo, trembling, anxiety, violent vomiting and diarrhœa, lasting for several hours, followed by a deep and long sleep, after which she remained perfectly well. (4. 11.)

CASE 3.—A *tertian* which had lasted two months, was cured by using tea-spoonful doses of an infusion of one ounce of Arnica in six ounces of water—twelve ounces were used in all. (4. 11.)

In *typhus and putrid fevers*, Acetic-acid is often the only remedy which is necessary, as has been proven in many epidemics prevailing in whole villages and cities, but when the pulse and strength begins to fail, then Arnica may be used with great success in alternation with the Acetic-acid. (4. 11.) Stoll's indications for the use of Arnica in typhous, putrid and mucous fevers, were absence of all true inflammatory symptoms, when there was great prostration, an almost natural pulse, dry tongue, or one covered with much mucus or sordes, the patient being dull, drowsy, partially deaf, and slightly or gently delirious, and when a miliary or petechial eruption appeared. (4. 11.)

On the Lymphatics and Absorbents.—The action of Arnica on the lymphatics, lacteals, and absorbents, is supposed not to be nearly as great as upon the blood-vessels; the veins appear to absorb these substances only which are completely dissolved in water; the lacteals, such substances as are not actually dissolved, but merely emulsified, particularly the *oils* and *fats*; the lymphatic system is closely allied to the lacteal, but the office of the lymphatics is to collect the *albuminous* matters which have everywhere transuded from the blood-vessels, or been set free by changes going on in the soft parts; the function of the lymphatic glands is that of changing albumen into fibrin, and thereby compensating for the constant waste of fibrin which is going on in the wear and tear of the muscular system, amounting to not less than sixty-two grains per hour. (11.)

Clinical Remarks.—Vogt recommends Arnica against *cold swellings*, especially when they arise from metastasis of rheumatism; in swellings of glands, tumors of the liver and spleen; even in atrophy from disease of the mesenteric glands. Sobornheim says from its great power of producing absorption, it is very useful in *atonic dropsy*, and ought to be used much more frequently than it is. (11.)

ON THE MUSCULAR SYSTEM.

Fasciæ and Tendons.—Arnica is almost specific in those *muscular pains* which are so apt to occur in the weakly invalid; these pains may occur wherever there are voluntary muscles or their tendinous prolongations; the trunk is more commonly attacked than the limbs, the abdominal walls more often than the thoracic, and the legs more constantly than the arms; they are generally mistaken for the pains of neuralgia, hysteria, spinal irritation, indigestion, or disease of some internal organ. The tendinous parts are more frequently the seat of pain than the muscular, for every muscular fibre terminates at each end in tendinous fibre, and these are inserted into the bones; hence, whenever a muscle contracts, there are *four* strains upon the tendinous fibre, viz., one at each end of the muscle, and one at each of its insertions into bone; hence these pains are at least four times as numerous as all the muscles in the body. The following are some of their varieties (58. 11.)

When the gastro-cnemius muscle of the leg has been over-stretched or over-strained, the pain is confined almost exclusively to the origin and insertion of the tendo-achillis at the lower end of the calf of the leg, and in the heel; here it is often mistaken for a frost-bite.

When delicate females first attempt to sit up after a severe fit of illness, unless the head and shoulders be well supported, they are apt to get a severe pain in the aponeurosis of the trapezius, and occipital insertion of the same muscle. The back-ache of pregnant women, who have to keep erect all day with an extra burden to support, is a familiar instance; also the severe pain produced by the unusual strain thrown upon the erector muscles of the back while leaning over a table to cut out dress patterns; every midwife is familiar with the excessive sore-

ness complained of after delivery, arising from the immense muscular exertion required in the birth of the child; this muscular ache often reaches a high pitch of severity, so as to cause a burning pain between the shoulders, by many consecutive hours work at the microscope, in making specimens, taking notes, and raising and lowering the head continually. (56. 11.)

When the pain is seated in a muscle, it is generally described as an ache; when the muscle has been severely exercised, it changes into a burning-ache; when the sensation is referred to a tendinous part, it is spoken of as pain. The muscular aches often increase to cramps, or intense spasm, or contraction, coming on suddenly, attended with swelling and hardness, accompanied with severe pain of variable duration, and passing off slowly with a vibrating, twitching, or creeping sensation. The feebler the patient, and the more sensitive and irritable, the more apt are these muscular and tendinous pains to occur.

CASE 1.—A lady, aged fifty-four, after an attack of bronchitis, had intense pain between the shoulders and occipital region of the head, as if some one was burning her with a hot iron; also pains in the loins and small of the back; a continual grasping pain all over the abdomen, so severe when she walked that she was often obliged to stop; while in bed the abdominal walls were apt to be drawn up into lumps, on one side or the other, from a cramped state of the external oblique muscle. The cramp and swelling over the region of the liver was at times so great that she was supposed to have enlargement of that organ.

This lady who had been blistered on almost every part of the back and head, been leeches on the nape, between the shoulders, and over the abdomen; who in short had had blisters by dozens, and leeches by hundreds, would probably have quickly recovered under the use of Arnica. (11.)

CASE 2.—A party of gentlemen on a severe pedestrian excursion, were all tired on the first day, and that was all; on the second day some began to have frequent stitches in the side, could not sleep on the side, but only on the back; on the third day the pains in the side were terribly increased, and the whole sides were so tender that they could not bear the touch of the clothes. (58.)

CASE 3.—An editor accustomed to write twelve hours a day, often complained of severe and sometimes intense pain in a small spot corresponding with the tendinous portion of the rhomboideus major of the left side; this was at times so agonizing as to preclude any attention to business; it was instantly relieved by going to bed; he had had this pain for many years, and it had been referred by different physicians to diseases of the liver, of the gall-bladder, to indigestion, &c.; the pain frequently changed its seat, now on the right side, then on the left, but always confined to a space between the spine and scapula; sometimes, though rarely, he had pain in the spine and occiput; it was muscular, arising from contraction of the rhomboideus, a thing of which every one must be aware who writes for a long period without rest. (58. 11.)

CASE 4.—A delicate medical student, accustomed to long walks, was attacked with apparent peritonitis, affecting the region of the cæcum and ascending colon; he was suddenly seized with pain in the right iliac region and loins, but which was really seated at the junction of the right obliquus externus muscle with its aponeurosis. (58.)

CASE 5.—A phthisical lady, after a fit of illness, attempted to knit and sew; she was seized with what she supposed to be severe headache, and pleurisy about the upper part of the lung; but the pain was really seated in the trapezius muscle, in its course from the occiput to its claviculo-scapular attachment; these pains often seem to be prolonged into the occipito-frontalis, to the insertion of the sterno-mastoid, and the origin of the temporal muscles, so that a large portion of the head is painful. (58. 11.)

CASE 6.—Next to the trapezius muscle, the longissimus dorsi and erector spinæ is most frequently affected, as might be supposed from the work it has to perform in keeping the body erect during sitting, standing and walking; continued stretching of its strong fibrous aponeurosis, such as occurs in stooping, becomes almost intolerable after a time. A delicate nurse, accustomed to carry a heavy infant, had had back-ache for a long time, and finally fainted away; the back-ache rarely came on before noon, then it seemed as if hot water had been poured down her back, getting hotter and hotter till bed time; it was always relieved by throwing the head and shoulders back, and was well the instant she lay down. (58.)

CASE 7.—A lady had had lumbar pain for ten days; after lifting something she was suddenly seized with intense pain in the small of the back on the right side; a lump rose up the size of a small lemon in the fleshy part of the longissimus dorsi, evidently cramp; she almost fainted, and had a severe rigor. (58.)

CASE 8.—A lady reduced by headache, menorrhagia and diarrhœa, was suddenly awakened by intolerable pain in the right flank, and a swelling, the size of an egg, attended with vibrating sensations; no position gave relief, except the curious one of lying across the bed, with her face over one side and the feet over the other, with a hard pillow under the affected part, to stretch the cramped muscles as much as possible; the pain now extended toward the median line, with a swelling under the right ribs, and a drawing or grasping feeling in the external oblique muscle. She had previously been a victim to muscular pains in many other parts; her first attempt at walking after a long illness, was attended with intense cramp in the rectus abdominis and external oblique; she suffered habitually during pregnancy from aching in Poupart's ligament, and often had to rest her head for an hour at a time to escape from spasm or burning ache in the trapezius; she has had pain in the tendinous expansion of the triceps extensor cubiti from resting her head on her hand, and is no stranger to pain in the pubic insertion of the rectus abdominis. The quadratus lumborum is sometimes the seat of muscular pain, and the glutei muscles which have a great deal to do in keeping the body erect and raising it up after stooping.

CASE 9.—A lady had much pain in the right quadratus muscle, which had been mistaken for disease of the liver; with pain in her thigh and leg from a habit of sitting on the edge of a chair and rocking herself towards the right side, constantly using her right leg to steady herself. A woman after stooping a good deal, was seized at night with intense pain at the lower part of the back and over the left gluteal region, recurring with every turn she made; towards morning it left the one side and attacked the other less severely; the slightest movement brought on the suffering. (58. 11.)

ON THE TISSUES.

On the Cellular Tissue.—Some authors suppose that Arnica exerts a specific action upon the cellular tissue, and not merely upon the capillaries which ramify in this substance. (11.)

Clinical Remarks.—In an ordinary *bruise*, the cellular tissue sustains a greater or less degree of disruption; blood is extravasated, and swelling results. If an arterial branch of considerable size has been ruptured, a tumor forms rapidly, and is distinctly fluctuating, consisting of escaped blood yet in a fluid state; after a time partial coagulation takes place, the clot being arranged at the circumference of the swelling, and the fluid portion occupying the centre. In a healthy state of the system, and an active condition of the veins and absorbents, many ounces of blood may be absorbed in a short time, i.e., in a few days; but we are often obliged to contribute towards absorption by proper remedies, and among these Arnica is one of the most useful and important, especially when the blood remains fluid; when it is firmly coagulated, Muriate of Ammonia may be required.

In furuncles and boils.—Boils are defined as a limited inflammation of a small portion of the skin and cellular tissue, ending in the death or sloughing of the latter, accompanied by laudable suppuration. Arnica is regarded as one of the most useful and specific homœopathic remedies against boils. Teste, with very lame logic, says Arnica acts principally upon the muscles and cellular tissue, and hence *boils* are the cutaneous affection which it most readily causes and cures. Teste also assumes that it will cure internal maladies arising from the retrocession of boils and acne.

CASE 1.—A man aged thirty, had suffered for months with boils on his face, neck and shoulders; after they disappeared, an intense angina sat in, and this alternation of diseases had been going on for several years. Teste prescribed Arnica, which arrested the throat disease in a few days, and the boils have not since appeared.

On the Dermoid Tissue and Skin.—Dierbach says that its action upon the skin is the most marked, and ranks it among the *Diaphoretica Mitiora*; he also mentions that the Arnica perspiration sometimes assumes a red color on the chest.

Hahnemann mentions two varieties of eruption produced by Arnica: First, a sort of pustule, very painful to touch, with a red, inflamed

base; this led him to administer it in *boils*, and with success; he also found it useful in preventing the return of boils in persons subject to them. Second, a vesicular eruption, described by Hahnemann as an itching military one. (11.)

Dr. Black has noticed eruptions several times from the external use of Arnica.

CASE 1.—A lady, with an irritable skin, and liable to erythema of the face, applied fifteen drops of the tincture in an ounce of water, to her nose, which had been bruised, and the skin slightly broken: in twenty-four hours the skin became slightly red, and a very small vesicular eruption appeared, attended with itching, lasting four or five days; the nose swelled a great deal. This lady also applied it at another time, to a toe inflamed by the pressure of her shoe, and the same effects followed. (11.)

CASE 2.—A gentleman applied it to a bruise upon the elbow, and in a few days an eruption like pin-heads, with redness of the skin, appeared. (11.)

CASE 3.—A lady with a very irritable skin, applied the tincture very much diluted, to allay the irritation of flea-bites; it caused a very irritable and slightly vesicular eruption about the size of medium pin-heads. (12. 11.)

CASE 4.—A lady applied from twenty to thirty or forty drops of the tincture in an ounce of water, to a sprained wrist, for fourteen days; on the twelfth day a slight redness and small military eruption of the skin appeared, attended with great itching; in two days more this increased very much, the whole fore-arm and hand were greatly swollen and red, the surface covered with numerous small semi-transparent vesicles, with red bases; in some parts they were confluent, attended with great heat and excessive irritation from the itching; some of the eruption faded away, but the redness and swelling continued. On the eighth and ninth days the swelling had spread beyond the elbow, but there was no eruption on this part; on the tenth day there was heat and itching of the face, the skin became red, and some eruption broke out on the malar bone; the swelling and redness soon included the left eye-lids, but no eruption appeared there. When the irritation had completely subsided in the arm, the skin remained red for some time, covered with slight scales, and almost as hard as leather; there was little or no fever. (12.)

CASE 5.—Dr. Russell reports a similar case; a lady, aged fifty, applied a lotion of one part of Arnica to eight of water, to her foot and ankle, for a sprain; on the next day the instep was very red, but painful, intolerable itching, œdematous, and a few vesicular elevations were visible; the rest of the foot, ankle and lower part of the leg soon participated in the affection; the pain was great enough to deprive her of sleep, and continued for a fortnight. (12.)

CASE 6.—Dr. Russell observed similar, but less severe symptoms follow the use of Arnica to the fore-arm of a gentleman.

CASES 7 and 8.—I have seen two very annoying cases, both on the

legs of gentlemen, in which Arnica was used for sprains of the ankles; the eruption resembled that of erysipelas, and was almost as severe; also several slighter attacks. (11.)

Drs. Black and Russell did not derive any benefit from Rhus and other homœopathic remedies, in- and externally; Sweet Oil and Lime-water will afford relief. Dr. Black suggests the use of Arnica in eczema, or salt-rheum, in vesicular erythema; also in the miliary eruption attendant on rheumatism, gastro-enteritis, and perhaps puerperal and typhus fevers.

CASE 9.—A man aged seventy, fell from a chair and bruised his hand; diluted Tincture of Arnica was applied: the next day the injured hand was of a dark blue color, almost black, the face, neck, breast and back were in a state of erysipelatous inflammation; the injured hand became covered with vesicles of various sizes, some of them as large as a pigeon's egg, which gave the skin the appearance of a rhinoceros hide; the pulse was quick and patient depressed; in fourteen days several pustules appeared, which passed off with the erythema, and the patient recovered. (11.)

Head.—Vertigo. Obtusion of the head. Burning in the head, accompanied by a dull, continued pain, as if the head were being distended from within outwards. Burning in the brain, *the rest of the body being cool*. Throbbing headache in the temples. Headache over the eyes, extending towards the temples, with a sensation as if the integuments of the forehead were spasmodically contracted. Aching, with traction, in one half of the skull, beginning at the ear and coming out at the top of the head. Violent stitches in the forehead when coughing. Jerking stitches in the forehead and temples; headache in the left temple, returning from time to time, pricking and tearing. Jerking, lancinating headache when stooping, as if everything would issue from the forehead, accompanied by nausea, qualmishness, tearing headache. Pain resembling severe electric shocks. (1. 26.)

Clinical Remarks.—In injuries of the head and face.—A girl of four years fell, in coming down-stairs, on the left side of her face, her nose and forehead. Her left cheek was red and blue from the contusion, her nose greatly bruised, with abundant bleeding from it, and great paleness of the face. A solution of Arnica and water was applied, and some Arnica taken internally. The child at the end of some hours was perfectly well. The lotions, however, were renewed, and the next morning nothing could be perceived, excepting a very slight blue mark on the bridge of her nose; no swelling had supervened. (80. 26.)

Feeling of tension, heat and swelling of the face, which are often produced by travelling on coaches or railways, may be relieved by Arnica, taken internally, and bathing the parts with a solution of Arnica. (80. 26.)

In apoplexy and paralysis.—Arnica has been used in paralysis since

the time of Junker in 1736, and although it was for a time supplanted by Nux and Strychnine, its use was revived by Schneider in 1821, who preferred the etherial oil of Arnica in the paralysis which remained after apoplectic attacks, and by Graefer, who used the flowers against paralysis from injuries. (4. 11.)

In dropsy of the head.—Golis rendered himself famous by his successful use of Arnica in the latter stages of dropsy of the brain. The celebrated Neumann has seen the most decided good effects from the in- and external use of Arnica in acute hydrocephalus. (11.)

Concussion of the brain is often accompanied by congestion, depression of the cerebral action, stupor, &c. All these symptoms are either prevented or relieved by speedily washing the parts which have received the shock, with the tincture of Arnica, which should at the same time be given internally. A linen compress may be applied to the part, and moistened more or less frequently, according as the injury is more or less considerable. As soon as the above-named symptoms have disappeared, the use of Arnica must be stopped, the rest is to be left to nature.

The smaller vessels of the brain, when torn, have frequently been healed by Arnica. Secondary hæmorrhage in the brain, congestion of blood, secondary suppurations and effusions of lymph, have frequently been prevented by the proper and speedy application of the tincture of Arnica.

The following two cases will show that Arnica may sometimes even restore health, when the concussion had already lasted for a good while.

CASE 1.—A strong man of sixty years, who was addicted to drinking, had fallen through a trap-door into a cellar. Several hours afterwards he was found, apparently lifeless, with his head lying upon the fragments of some earthen vessel, his feet resting upon the stair-case, and blood had rushed from nose, mouth and ears. He had been somewhat revived by washing him with vinegar and water, by introducing vinegar into his mouth, and by causing him to smell of the Spirits of Hartshorn. During the night he lay in a state of stupor. In the forenoon he had frequently been attacked by shiverings and vomitings, the latter especially after eating soup. He was unable to lift up the right arm without help. I was sent for in the afternoon.

On the right side of the forehead I discovered a wound of about one-quarter of an inch in length, both ears being full of blood. The right side of the face was tinged blue by extravasated blood; the whole right half of the head was very painful; the right side of the neck, chest and upper arm was swollen, and marked with extravasated blood; he felt thirsty, was constantly desirous of blowing his nose, which was always followed by bleeding from the nose; there was also extravasation of blood behind the conjunctiva, with irritation of the brain, vomiting and delirium. Six days after the fall, by the internal and external use of Arnica, he was completely restored.

CASE 2.—A stout young man fell from his horse, and was dragged

to a considerable distance. He was picked up in a state of stupor. I applied Arnica in the same way as in the previous case. The next day he was able to walk out, and on the third day he was entirely restored. (80. 26.)

Apoplexy.—CASE 1.—A man, aged seventy-two years, was suddenly seized with a fit of *apoplexy* while standing; before falling to the ground, he complained of feeling dizzy, now he lay unconscious, his lower jaw hanging down, the extremities of the left side insensible and paralyzed; he talked incoherently, without being able to articulate distinctly; often raised his right arm, pointing to the head; his pulse was very full, and intermitted every seventh beat; his face was red. Under the use of Arnica he gradually recovered in the course of a few days. (64. 26.)

CASE 2.—A middle-sized man, aged fifty-three years, with short, thick neck, rather addicted to brandy, was taken with an apoplectic fit, for which he was bled. After a few days, when he came under homœopathic treatment, he was in the following condition: Frequent awaking during the night, with attacks of hiccough and gulping up of fluid, followed by shuddering, stretching, repeated about every half hour, without being conscious of it. During the day he had pressure in the forehead, with buzzing in the ears, vertigo, sparks before the eyes, illusion of sight, general malaise, coldness of the extremities, shiverings through the body; pulse 60, tolerably strong, and irregular, with burning itching of the skin.

Arnica 3, two drops, repeated the second day, effected a cure in three days. After a lapse of five months, he had another attack with a similar train of symptoms; at night, hiccough, &c., with noise and rumbling in the abdomen, rigidity of the body, vacant look and unconsciousness for about an hour, followed by cough and renewed respiration, with foul breath and cold sweat; this condition recurred several times but each in a less intense form. Arnica 3d freed him from this condition in a few days. (64. 26.)

CASE 3.—A school teacher, aged thirty-seven years, had an apoplectic fit five years ago, and since then his memory had failed him to a very marked degree. A few doses of Arnica 3d restored him completely. (64. 26.)

Dropsy of the brain.—CASE 1.—A delicate boy, aged two and a half years, five weeks subsequent to an attack of measles, was found in the following condition: Violent headache, squinting of the eyes, is afraid as though he would fall, and actually does fall backwards occasionally; vomits; twitching of the arms and hands; screams; will only lie on his back; is at times unconscious, difficulty in rousing him; head hot, pupils dilated, breathing oppressed; urine scanty, of a reddish tint; pulse quick and small.

Aconite and Belladonna were administered without apparent success. Under the use of Arnica 3d, with an occasional dose of Merc.-sol. 2d, he recovered in two weeks. (64. 26.)

CASE 2.—In a case of *hydrocephalus acutus*, where Aconite and

Belladonna were administered without any apparent benefit, Arnica 6th brought about a happy result. (64. 26.)

CASE 3.—An attack of *encephalitis*, in a girl aged twenty-one years, after a severe fall on her head, followed by an aggravated train of symptoms, was cured by Arnica 4th, except temporary blindness, which was cured by Bell. and Opium. (64. 26.)

A man, aged thirty-five years, having received severe blows about his head, was suffering from the following symptoms, with increase of the headache from day to day:—Pressing pain in the forehead, with burning heat in the brain, and coolness of the rest of the body; increase of pain after eating, with heat of the face, roaring in the ears, and contracted pupils; nausea early in the morning; dislikes smoking, contrary to his usual taste; tenesmus, constipation; disturbed sleep by unpleasant dreams; feverish towards evening, and ill-humored. After taking Arnica 6th for two days, all the above morbid conditions disappeared. (64. 26.)

In alcholismus chronicus, vertigo spuria, or ocular dizziness.—A tall and rather cachectic man, aged forty-nine, who had been in the habit of taking ten or twelve drinks a day, was attacked with weakness in the arms and legs, glimmering before the eyes, and noises in the ears; during the last week the debility had increased so much that he could scarcely walk; his sleep was disturbed with phantasies and formications, and he had the following kind of attacks of vertigo, often several in an hour, then only one in several hours: without any warning and in any situation, all objects would seem to move with a shaking motion, either towards him or from side to side, or to fall over; he would soon begin to stagger about with them, if he did not seize hold of something; in a few minutes he recovered himself, his illusions of sight disappeared, but he felt as if intoxicated; all his functions were normal, but his face was red, eyes injected, and pupils dilated, but his sight was good.

An infusion of Flowers of Arnica, in increasing doses for six weeks, restored him. (4. 11.)

Mind and Disposition.—Absent-minded. Confusion of thoughts. Weakness of memory. Disinclination to mental occupation. Uneasiness of the mind and body. Hypochondriac anxiety. Excessive sensitiveness of the mind. Quarrelsomeness and peevishness. Obstinate and headstrong. Hopelessness. (19. 26.)

Clinical Remarks.—In the muscular pains which have been and will frequently be referred to, the patients often lay peculiar stress upon the mental depression produced by the perpetual recurrence of the suffering; the despondency does not arise simply from the pain, but from that feeble condition of the body upon which the pain depends; we all know that when a patient is weakly, low spirits are common. (11.)

Sleep.—Frequent yawning. Frequent yawning, without any sleepiness. Sleepiness. Sleep full of dreams, and not refreshing. Anx-

ious, heavy dreams the whole night. He has terrible dreams, screams aloud while asleep, which wakes him up. Starting up while asleep. Lamenting when asleep. Loud, unintelligible talking when asleep. Involuntary expulsion of fæces while asleep. Sleepiness during the day. Somnolence, frightful dreams. While falling asleep at night, he is roused from sleep by a peculiar sensation of heat in the head; this is followed by anguish when awake; he dreads similar attacks, and is afraid that he may have an apoplëctic-fit. (1. 26.)

Eyes.—Cramp-like tearing over the left eye-brow. Contraction of the pupils, with obnubilation of the head. Staring eyes, denoting anguish. Dilatation of the pupils. Stitches in the eyes. Burning in the eyes. Occasional flow of tears, which burn like fire. Drawing pain in the right eye-ball. (1.) Obscuration of sight. (19. 26.)

Clinical Remarks.—*Injuries of the eye.*—CASE 1.—Mrs. H., while engaged in frying a pancake, a portion of the fat squirted into her eye. The agony it produced was intense. She applied a solution of Acetate of Lead, by the advice of a surgeon. I saw her the following day. On examining the eye, the vessels were turgid, and the eye presented a high state of inflammation. She felt shooting pains in the eye and temples, with flowing of tears; the parts around the eye and cheeks were inflamed. Arnica both externally and internally in solution was ordered, and the consequence was a cure in three days. (80. 26.)

CASE 2.—Mrs. N. A., aged twenty-eight, while running up-stairs, struck the angle of the forehead, just over the eye, causing a wound of an inch and a half in length, and a quarter of an inch in width; the bleeding was profuse. In eight hours after the use of Arnica, both internally and externally, in solution, the wound was closed, presenting at the spot scarcely any inflammation, and only a mark, as of a wound newly healed. The patient was astonished and gratified at the speedy restoration. (80. 26.)

CASE 3.—Mrs. P., aged twenty-five, while in bed, her child happened to pass her foot across her mother's eye, lacerating with the toe-nail the transparent cornea, causing all the concomitants of a high degree of inflammation. Arnica both externally and internally brought about a cure in less than a week, leaving no scar perceivable, except on minute examination. (80. 26.)

CASE 4.—A gentleman fell from a carriage, knocking his head against the hard pavement, bruising his cheek, temple and eye dreadfully. The swelling was very great, and the pain intense. The eye was closed, bloodshot, and the eye-lids lacerated. Arnica was given in solution both internally and externally; the parts were entirely healed in eight days. (80. 26.)

CASE 5.—A young girl, while running behind a carriage, fell with her head against the foot-steps behind, lacerating one of her eye-lids, and causing great swelling of the parts. After examining the extent of the injury, the parts were brought together, and Arnica in solution

applied externally and Arnica 6th internally, effected a cure within four days. (80. 26.)

CASE 6.—A man while passing a field of rye, two weeks ago, had a small particle of the same blown into one of his eyes, causing a small depressed ulcer of the cornea, with inflammation of the surrounding vessels. Arnica externally and internally, twice a day one drop of the tincture in some water, effected a cure in seven days. (64. 26.)

CASE 7.—A man, aged thirty years, hit his eye accidentally three days ago. Symptoms as follows: the eye much inflamed; opacity of the cornea, on the same a small whitish-grey spot; sclerotica injected; flowing of tears from the eye, and photophobia. Tinct. Arnica, ten drops in water, applied externally, effected a cure. (64. 26.)

CASE 8.—A young man, aged eighteen years, received a severe kick from a horse on his right eye, in consequence of which severe inflammation ensued, with swelling of the eye-lids, flow of tears, and violent pain. Arnica 6th continued for six days, effected a cure, except the flow of tears and violent pain, which were cured by Euphrasia. (64. 26.)

CASE 9.—A lady, aged thirty years, in the fifth month of gestation, was suffering from the ill effects of a cold bath, taken fifteen months ago, from the following symptoms: Very frequent mouches volantes; sewing or reading causing her great pain and obscuration of sight, with dull pain over the eyes, and feeling of tightness of the head. Arnica 3, a dose every morning, effected a cure in four weeks. (64. 26.)

CASE 10.—A boy, aged twelve years, had received a fall a year ago on the arcus supra orbitalis of the left side, causing *myopia* of that eye. The use of Arnica diluted with water externally, and Arnica 21st internally for one month, restored his natural sight. (64. 26.)

CASE 11.—In consequence of a *commotio cerebri*, an amaurotic condition developed itself in a middle-aged man; the vision of the right eye gradually became impaired, so that everything appeared to him as though he was looking through a dense fog, until he could not distinguish light from darkness, although on examining the eye nothing abnormal could be seen. Sixteen doses of Arnica 2d restored his eyesight completely. (64. 26.)

In rheumatic inflammation of the eyes.—A robust man, aged fifty, after taking a severe cold, was attacked with general rheumatic fever, which finally settled in both eyes; he had lachrymation, piercing and rending in both eyes and their neighborhood, increased in bed and by warmth; the conjunctiva was much reddened, and he could no longer bear the light.

Confinement to a dark room for fourteen days, repeated bleedings, leeches behind the ears, purgatives and diaphoretics were used without avail; then fourteen days more were expended in the use of various rheumatic remedies and external applications, even Corrosive-sublimate was used in- and externally, but the eye-affection increased so that the pains extended over the whole head and face, and the ball of

the eye resembled a piece of raw meat. An infusion of Arnica was now used, and in seven days he was comparatively restored; the remedy produced profuse sweats and urinations. (14. 11.)

Ears.—Intermittent pressure in both ears, in the region of the tympanum. Dull stitches through the internal ear. Humming in the ears. (1.) Ringing and buzzing in the ears. (19. 26.)

Clinical Remarks.—CASE 1.—A boy broke a lucifer match in his ear in endeavoring to remove some wax. The ear became much inflamed; fever was present, and shooting pains passing from the ear to the head were severe; the past night had been one of continued agony. Arnica, both internally and externally applied, afforded great relief, and on the fourth day he was quite well. (64. 26.)

CASE 2.—A boy nine years old, in consequence of having taken a severe cold, became affected with partial *cophosis* of both of his ears. Allopathic treatment had been resorted to in vain, when finally after three months' homœopathic treatment with Arnica, a cure was effected. (64. 26.)

CASE 3.—A small, active boy, aged nine years, took cold after being overheated, and was attacked with hardness of hearing in both ears, which almost amounted to complete deafness; there was no foreign body, nor excess of wax in the ears; he only complained of constant noises in his ears, supposed he heard wind instruments or the striking of a clock; he had no pain.

The greatest variety of internal and external remedies were used without effect; galvanism was used for several months, until finally, after being almost deaf for five months, he was cured in three weeks by drinking an infusion of Arnica. (4. 11.)

CASE 4.—An officer had gradually been becoming deaf for thirteen years; ear-trumpets, ear-oils, douches of Carbonic-acid gas, &c., did not help him; the external use of an infusion of Arnica, and afterwards of the Ethereal Oil of Arnica, produced much relief. This cure caused a great sensation in Hanover, and Medical Counsellor and Professor Krause was led to use it in several cases of deafness, with much success. (4. 11.)

CASE 5.—A healthy farmer, aged seventy-four, had been losing his hearing for several months; he was quite deaf in his right ear, and almost so in his left. Instead of drinking an infusion of Arnica, as he had been ordered, he poured some of it in his ears, every three hours, and recovered his hearing entirely in eight days; he lived five years longer, became somewhat deaf several times, but was always relieved by the Arnica. (4. 11.)

Nose.—Lancinating pain in the nose. Swelling of the nose. Frequent bleeding of the nose. (1. 26.)

Clinical Remarks.—According to Hahnemann, Kreuss, and Hartung, Arnica is homœopathic to bleeding of the nose, when caused by external violence, or when there is a sensation of crawling and pricking in the nose and forehead, with heat; or when during epistaxis the blood is liquid, bright red. (24. 26.)

Face.—Pale, sunken countenance. Dry heat of the face, with cold nose and absence of thirst. Hot, red swelling of the cheeks, throbbing, twinging pain; swelling of the lips, with intense heat; the rest of the body being cool. Cracked lips. (19. 26.)

Jaws and Teeth.—Toothache, with swelling of the cheek. (32. 26.)

Clinical Remarks.—Arnica is homœopathic according to Hartung, after the extraction of teeth; it stops bleeding quickly, and also sometimes cures toothache with throbbing, pressing pain, with sensation as if the teeth were too long, with congestion of the gums, worse on touching, and hard swelling of the cheeks. (64. 26.)

CASE 1.—A lady was suffering terribly with toothache, heat and swelling of the gums, and drawing, stitching pain in the teeth of the right superior maxillary bone, extending up to the ear; face red, burning hot, with swelling of the cheek; worse in the air and on applying heat. She had two teeth plugged a few days ago. Arnica 30th gave almost instantaneous relief. (64. 26.)

Mouth.—Dryness in the mouth, with great thirst. Dryness in the mouth, without any thirst, early in the morning, with putrid taste. (1.)

Pharynx and Œsophagus.—Feeling of dryness in the throat. Stinging and burning in the throat. Burning and scraping sensation in the Œsophagus, with shivering. Pressure and violent stitches in the Œsophagus. Difficult deglutition. (19. 26.)

Taste and Appetite.—Putrid, slimy taste in the mouth. Repugnance to meat and broth, desire for vinegar. Want of appetite, the tongue being coated white and yellow. Bitter taste. (32. 26.)

Gastric Symptoms.—Bitter taste in the mouth. Putrid, slimy taste. Sputa mixed with blood. Empty eructations. Early in the morning eructations tasting of rotten eggs. Gulping up of saltish water. Nausea and disposition to vomit early in the morning. Heart-burn. Nausea. Qualmishness of the stomach, with empty eructations. Retching, unto vomiting. Vomiting of coagulated blood. Violent pressure on the sternum, over the pit of the stomach. Violent jerks under the stomach. (1. 26.)

Clinical Remarks.—Arnica is often useful against the muscular pains and soreness which remain after severe vomiting; the violence of the suffering often suggests the idea of inflammation, neuralgia, or hysteria, as it is often attended with a rapid pulse, disorder of the stomach and bowels, and great tenderness of the walls of the abdomen. (58. 11.)

CASE 1.—After a severe attack of vomiting, a lady complained of intense pain in the trunk, which shot up to the head and neck, and down to the hips and knees; she was constantly moaning from its severity; it started as if from a focus, and rushed in radiating lines to all parts and in all directions; up and down along the erector-spinae, vibrating, twitching and tearing; the pain was constant, but there were severe aggravations; it was equally severe in the external and internal ob-

lique, transversalis, rectus abdominis, quadratus lumborum, latissimus dorsi, pectorals, gluteal and crural muscles; the attachments of the diaphragm were also mapped out by the painful spots. (58. 11.)

Stomach.—Feeling of repletion of the stomach, accompanied by loathing. Pressure in the pit of the stomach. Pinching, spasmodic griping in the stomach. Flatus, accompanied by pressure at the stomach. Oppression at the heart. Pressure, as if a stone were lying in the stomach. Rumbling in the stomach, with colic. Aching transversely across over the pit of the stomach, with dyspnœa. (1.) Stitches, burning, distention, drawing and painful throbbing in the region of the stomach. Violent cramps of the stomach, with distention of flatus. (19. 26.)

Clinical Remarks.—In *Hæmatemesis*.—A servant girl, in consequence of ill-treatment, became affected with *hæmatemesis*, for which she was treated allopathically for five weeks without receiving any benefit therefrom. She also complained of general malaise and a feeling of soreness through her whole body, with almost constant nausea, pain in the stomach, and vomiting of everything she partook of, always co-mingled with blood. A perfect cure was effected by Arnica 6th in four days, by Dr. H. B. Harris. (81. 26.)

In Dyspepsia.—A woman, aged forty-two years, suffering for years from dyspepsia, and subject to indolent ulcers about her legs, which at present appear to be forming again. After every meal, pain and heaviness in epigastrium, with heat and pressure over the forehead and temples; nausea, at times vomiting; dizziness on walking in the open air, distention of abdomen before and after eating; restless at night, with bad dreams, and a feeling of general malaise in the morning on eating. Arnica 12th effected a cure of dyspepsia, and the ulcers of her legs re-appeared again.—(Neville Wood.) (81. 26.)

Abdomen.—*Spasm* in the hypogastric region. Pressure below the last ribs. Stitches under the false ribs of the left side, intercepting breath. Tense distention of the right side of the abdomen, when at rest; the part is painful as from an internal wound; when coughing, blowing the nose, or setting down the foot, it feels painful as if it had been shaken, torn or cut to pieces; it is even painful when merely touched externally; the pain is relieved by the emission of flatulence, and rages every day from morning until two o'clock in the afternoon. Pain in the region of the liver. Tearing and pinching over the umbilicus. Sharp stitches in both loins. Sharp thrusts through the abdomen. Retraction of the umbilicus. Rumbling of flatus in the abdomen. Colicky pains. Fermenting flatus in the abdomen. (1. 26.)

Clinical Remarks.—Arnica promises to be an efficient remedy against the so-called "*phantom tumors*" of the abdomen. (11.)

CASE 1.—A washerwoman had a great deal of washing once a fortnight, and used a high tub over which she was constantly stooping; then a tumor would form, occupying the position of the rectus abdominis muscle, sometimes one segment, sometimes another; it

was attended with pain, and seemed to double her up; any heavy day's work would bring it on; if the bowels were costive, straining at stool would bring it on. (58.11.)

CASE 2.—A young woman was supposed to have a tumor of the abdomen; a swelling, about the size of the palm of the hand was found in the left hypochondriac region; it was raised, very firm, painless to touch; it remained unchanged for six weeks, when a blister was applied, and the tumor left that side but appeared on the other, and again succumbed to a blister; the so-called tumors travelled successively over every part of the fleshy walls of the abdomen; blisters pursued them unrelentingly, and at last the patient was cured; the tumor was nothing more than cramps in isolated parts of the external oblique, rectus, and probably other muscles. Arnica, or Conium, or Belladonna would probably have removed the first one, and the others would not have occurred. (58. 11.)

CASE 3.—A woman was admitted into a hospital with a tumor in right side of abdomen; on examination, no tumor was there; but after a severe fit of coughing, intense pain came on in abdomen, and doubled her up; these severe pains was always attended with a lump which went away with a beating sensation. (58. 11.)

In spasms of the abdominal muscles.—The abdominal walls are very frequently the seat of pain and cramp, or spasm; the complaint in some is most urgent at the epigastrium, in the upper portion of the rectus muscle, and is frequently mistaken for disease of the stomach; in others on the left side, where it is mistaken for neuralgia, or disorder of the spleen; in others on the right side, and is supposed to indicate disease of the liver, or distention of the colon; others, again, complain equally of all these spots. (58. 11.)

CASE 1.—A laboring man, accustomed to lift heavy weights, often had severe pain about the ensiform cartilage; it sometimes took him half an hour to go half a mile, and he was often fairly doubled up with pain; different segments of the rectus muscle were frequently cramped; lumps, or isolated cramps in the left external oblique, and pains in the region of the erectores spinæ often occurred. (58. 11.)

Stool.—*Tenesmus*, with emission of flatulence. Flatus smelling like rotten eggs. *Tenesmus*, followed by a copious, thin, or pap-like sourish smelling stool, giving great relief, (every day four or five times.) *Tenesmus* every half hour, when nothing except slime was passed. Hard, difficult stool, with pressure in the abdomen. Diarrhœa, with distention of the abdomen previous to stool. Aching in the rectum. Frequent, small stools, consisting only of slime. Frequent stool; after every stool he is obliged to lie down. White diarrhœa-like stool. Diarrhœa resembling brown yeast. Constipation. Involuntary stool at night, when asleep. Undigested stool. Blind hæmorrhoids. (1. 26.)

Clinical Remarks.—CASE 1.—A girl aged two years and six months, was affected with liquid, foaming, acrid and very offensive smelling

discharges from her bowels, several times daily, with much flatulence and distention of the abdomen: appetite deficient, with bad smelling eructations; sleep at night restless and interrupted; temperature of the body variable; countenance of an ashy-colored hue; malaise, irritability of temper, and some cough. Tinct. Arnica-radiciis, six drops in three ounces of water, divided in six doses during twenty-four hours, effected a cure in three days. (64. 26.)

Frank decides from the experiments with Arnica, that it irritates the alimentary canal from the mouth to the anus; that it acts more upon the muscular fibres than upon the blood-vessels, and hence facilitates the peristaltic contractions of the bowels more than it does the secretions or absorbents. It should be used in *dysentery* much more than it has been, as it is one of the most homœopathic remedies to this disorder; it was a favorite remedy in dysentery with the late Dr. Curtis, who used it both by mouth and injections. It is also one of the most important remedies against *flatulence*, and will often succeed where Carbo and other appropriate remedies fail; also in *diarrhœa*, with copious, thin, sourish, or yeasty stools. Some old-school physicians have hit upon its use in dysentery. Frank says the excellent action of the Root of Arnica has been proven in many epidemics of dysentery. Vogt recommends it in persistent *atony of the bowels*, with an habitual and truly colliquative diarrhœa, when there are also purulent decompositions of internal organs; in cases where inflammation does not keep up the suppuration, but a truly dissolving and decomposing process is at the bottom of it. Dr. Kitchen, of Philadelphia, had his attention called to the use of Arnica in *dysentery* by a friend, who, after the use of the ordinary weak remedies for two or three days, determined to take hap-hazard the strongest remedy in his case; this was the Tincture of Arnica, all the other medicines being in pellets; to his surprise he was soon relieved and perfectly well in twenty-four hours, though there had been excessive pain and bloody and mucous discharges; Dr. Kitchen was thus led to try it, and found it a most valuable remedy in the dysentery of 1853. He put six or eight drops of the Tincture in a tumbler half full of water, and gave one teaspoonful every half, one or two hours, according to the severity of the symptoms; it generally allayed the pain in a very short time, and frequently the bloody discharges, leaving only mucous ones; the symptoms most benefitted by Arnica were the pains of all kinds attendant on the disease, especially the bearing-down; also the difficulty in passing water, and the bloody and mucous discharges; in some cases, Arnica alone effected a cure in twenty-four, or forty-eight hours; in other cases it had to be continued for some days, and even aided by other remedies, such as Acon., Merc.-corr., Ars., Sulph., &c.; recent cases were more rapidly helped than chronic ones, although it was at times useful in these. (11.)

Dr. Toothaker having often prescribed Merc., Ars., Coloc., &c. with less satisfactory results than he expected, was led to use Arnica on Dr. Kitchen's recommendation; he gave it in the 3d attenuation

every half hour; the beneficial effects were marked in a few hours, and recovery was rapid. (11.)

Urinary Organs.—Frequent desire to urinate, with copious emission of urine. Retention of urine, with tenesmus of the bladder. Tenesmus of the neck of the bladder, the urine dropping out involuntarily. Cutting pain in the orifice of the urethra, at the termination of micturition. Brown urine, with brick-red sediment. A small quantity of red urine. (1. 26.)

Clinical Remarks.—Arnica has been recommended especially against *paralysis of the bladder*, arising from extravasations of blood in consequence of injuries of the spine.

CASE.—A patient who had suffered for three years with *paralysis agitans*, was suddenly attacked with entire retention of urine; only a few drops of urine would flow when hard pressure was made over the bladder, but the catheter could be introduced easily; Arnica was given in infusion, in half tea-cupful doses, several times a day; there was no improvement for three days, but suddenly on the fourth night he passed an enormous quantity of urine involuntarily; the remedy was continued, and the next day he passed urine voluntarily three times, and afterwards had no return of the ischuria for five months, when a relapse was cured on the fourth day, after taking eight doses of Arnica. (4. 11.)

Gross (see Diseases of the Urinary Organs, p. 232,) says, in paralysis of the bladder, consequent upon typhoid or other fevers, masturbation and general exhaustion, few remedies are as serviceable as Arnica; he thinks it is a powerful stimulant, which acts with peculiar energy upon the nervous system, and hence well adapted to all cases of this malady when dependant upon general debility; he gives from forty to sixty drops of the Tincture three times a day, watching its effects with care, as it may cause vertigo, purging, headache, vomiting, and spasmodic twitchings, when given in these large doses. (11.)

Genital Organs.—Violent sexual desire and continued erections, (in a weak old man.) Several pollutions in one night, with voluptuous dreams. Symptoms as if the menses would make their appearance. A girl of twenty years, who had not had her courses for one year, but was otherwise healthy, had an attack of nausea in the pit of the stomach, immediately after taking the medicine; this was followed by a lump of blood passing through the vagina. (1. 26.)

Clinical Remarks.—Mr. M., aged thirty years, received six days ago a severe blow on the right testicle. Symptoms as follows:—Scrotum very much relaxed; right testicle enlarged about three or four times its natural size, hard and hot, very painful on motion and to the touch; constant sharp pain when at rest along the funiculus to the inguinal region; funiculus swollen, and very painful; stitching pain in the forehead; bitter taste in the mouth; tongue coated white; frequent shivering over the body; pulse sluggish and small.

Treatment.—A suspensory bandage to be applied. Arnica 6th in-

ternally, and Tinct. Arnica diluted externally, cured in eight days. (64. 26.)

In the case of a single woman, aged eighteen years, of good constitution, who lost her menses fifteen months ago after having taken cold. Pulsat., Graph., Sepia, Sulph. and Rhus were given without effect. Besides headache and slight pain in the chest, nothing else troubled her. Arnica 12th, three days before the usual period of menstruation, brought about the desired effect. (64. 26.)

Griesselich says, Arnica has been used to produce abortion; also has been used with success in homœopathic doses against metrorrhagia. (64. 26.)

Arnica administered immediately after confinement, prevents severe after-pains and milk-fever; also against sore nipples, used externally. (64. 26.)

Some of the pains of irritable uterus have a muscular origin, as well as a nervous; Dr. Grumsdale regards the phenomena of some cases of retroversion and anteversion of the unimpregnated womb, as due to irregular contraction of its walls; in these instances Arnica may prove a useful remedy. (11.)

In Sweden, in alternation or combination with Tart.-emet., it is regarded almost as a specific emmenagogue. It is also used against abdominal plethora, when there is a suppression of the menses or piles. (4. 11.) Dierbach says that infusions of Arnica and other herbs, are favorite remedies among French women against the disturbances which are apt to arise at the change of life and cessation of the menses; Dr. Gray thinks Tincture of Sanguinaria a specific against the chills, flushes and perspirations which are so annoying to many women at the change of life. (11.)

Larynx and Trachea.—Sneezing; violent coryza. Hoarseness early in the morning. Frequent sneezing. Vapor, as of rotten substances, coming out of the mouth during an expiration, for two days. Dry, short, and hacking cough, as if from a titillation in the trachea, every morning after rising. Cough at night during sleep. Cough in children, produced by weeping and lamenting. Pain in the chest, as if it were raw, with roughness of the throat during cough. Hæmoptœ. Cough exciting vomiting. (1. 26.)

Chest.—Short, panting breath. Dyspnœa. Oppression at the chest, with anguish, pains in the abdomen, and headache. Excessive difficulty of breathing. Cutting aching, with pressing through both sides of the thoracic cavity, increased by inspiration. Pain in the left side of the chest, like pricks of pins. Stitching pain in the chest, accompanied by a short cough, which increases the pain, and by continued asthma. Stitches in the right side, left breast and sternum, during a deep inspiration. All the joints of the bones and cartilages of the chest feel painful as if bruised, during motion and breathing. Oppression at the heart. (1. 26.) Violent palpitation of the heart. (19.)

Clinical Remarks.—Sore nipples are cured by bathing them once a

day with a solution of Arnica. Before giving suck to the baby, the nipples should be washed with water for the purpose of removing the alcohol. (80. 26.)

In spasm of the Diaphragm.—In this disorder we find a constrictive pain around the body, pain shooting from the back to the epigastrium, and from side to side; painful respiration referred to every part of the diaphragm's insertion, and a sudden catch in the breathing not referrible to the intercostals, or abdominal walls; in these cases Arnica and Hyosciamus are useful remedies. (11.)

Pain referred to a small spot, about the size of a shilling, below the mammae, commonly the right, is frequent during pregnancy; it is tender to touch, and corresponds with the upper termination of the linea semilunaris; the pain is pretty constant, much increased by lying on the affected side; it may come on during the third month and continue till full term; its wearing character greatly depresses the patient's spirits; occasionally a similar pain is felt at the lower end of the linea semilunaris; they both arise from a stretching of the fibrous tissue. (11.)

Notes on Arnica in Pleurisy and Pneumonia.—a.) In pneumonia notha Arnica is an excellent remedy, if the irritation of the vascular system is very moderate, with a sensation of soreness of the chest, cough not frequent, and the expectoration of slime is streaked with blood.

b.) Characteristic indications for the use of Arnica in pleurisy, are especially uneasiness in the affected side; a constant desire for change of position in bed; a painful soreness of the chest, with general internal heat, with cold hands and feet; or when the patient complains of stitching pain in the affected side, with feeling of tightness of the chest, and frequent dry cough, causing increase of pain. (Hartmann.)

c.) If the expectoration in pneumonia is watery and foaming, or brown, of foul odor and mixed with foul blood, and brings no relief, then Arnica will be the best remedy; also if stitching pain remains after a deep inspiration, in traumatic inflammation after surgical operations and extensive injuries; not less useful in rheumatic form, especially when there is a certain degree of mental depression; also in nervous and torpid inflammations. (Büchner.)

d.) According to Watzke, Arnica is indicated in the first stage of pneumonia in strong built individuals, with consensual irritation of the brain. (26.)

e.) According to Peschier, in the remaining pain in the chest, oppression and dyspnœa, after the inflammatory condition has been removed by Aconite and Bryonia. (26.)

f.) Dr. Wurmb, of Vienna, says: as Arnica is one of the few remedies which cause resorption, it is a pity that it is overlooked too often by physicians in cases such as pleurisy; although Arnica appears to act more speedily when there is an exudation of plastic lymph, nevertheless it is very efficacious in serous exudations. (26.)

g.) The physiological provings of Arnica completely show its specific sphere of action on the lungs and pleura, with its numerous symptoms of bleedings from the substance of the lungs, and its prompt action

in arresting hæmoptysis, but the employment in pneumonia, &c., has been, I am sorry to say, hitherto too much overlooked, as it is not only indicated in pneumonia from mechanical injuries, but also in its idiopathic form, if the vascular excitement does not run too high. (Ch. Muller.) (64. 26.)

CASE 1.—A case of violent pain in the chest, in a man aged thirty-four years, brought on by heavy lifting. Symptoms as follows: violent stitches on a deep inspiration; coughing on motion, over the right superior half of the chest and axilla; cough, with difficult raising; slimy sputa; breathing and speaking difficult; violent pain in the forehead; dizziness, almost fainting at times, with everything turning black before the eyes; appetite impaired; bitter taste; tongue coated white; pulse full, moderately frequent; great prostration and emaciation. Arnica continued for five days at intervals, restored the patient, except the headache, which was cured by Rhus. (64. 26.)

CASE 2.—A soldier, aged twenty-four years, of short stature and good constitution, complains since a few days of violent pain in the chest, with the following symptoms: stitches in the integumentary parts of the right half of the chest; expectoration scanty, streaked with blood; great uneasiness of the body; feeling of tremor, and pulsation of all the vessels of the head; much feverish heat; very little sleep, and tossing about in bed at night; tearing headache, mostly in temples and forehead; much thirst; very little or no appetite; white, furred tongue; pulse 90 and 32 respirations in a minute; no stool for twenty-four hours. Cure effected by Arnica 6th in three days. (64. 26.)

CASE 3.—M., aged twenty-four years, sanguine temperament, just recovered from an inflammatory affection of the brain, cured by Hyosc., was taken with pneumonia. Symptoms: violent stitches in the side; feeling of fullness in the chest; breathing short, dyspnœa; short, dry, painful cough, with difficult expectoration of sputa streaked with blood; face red, appeared swollen; violent heat, with thirst; eyes sparkling, pupils not dilated; tongue dry; disgust for every kind of nourishment; urine yellowish-red; tenderness of the abdomen, without stool for twenty-four hours; pulse quick, hard and full; apprehension of death. Cure in eight days by Arnica 6th. (64. 26.)

Notes on Arnica in Hæmoptysis.—a.) If the blood is coagulated, dark, appearing without straining, with tightness of the chest, stitches in the thorax, burning palpitation of the heart, considerable heat in the abdomen, with general malaise, almost fainting; or else if hæmoptysis appears on vomiting and coughing, the blood bright red, foaming mixed with coagulated lumps intermingled with slime, sometimes with tickling under the zypoid cartilage, stitches during cough, in the head, and a feeling of soreness of all the ribs; it is likewise indicated after injuries to the chest, &c. (Hartung, Hartmann.) (64. 26.)

b.) According to Kreuss, Arnica is indicated also in hæmoptysis dynamically induced by continued coughing, with violent tickling in the throat-pit, and oppressive feeling in the cardiac region. (64. 26.)

c.) Weber says: I have cured hæmoptysis caused by injuries, sometimes of long standing, by Aconite and Arnica in alternation.

d.) According to Knorre, Arnica has been very useful in phthisical patients, when hæmoptysis was induced by apparent slight causes, such as moderate exercise of the body, movements of the arms, stooping, lifting, grasping, &c.

e.) Griesselich has found Arnica useful in hæmoptysis when caused by the growing of tubercles in phthisical subjects. (64. 26.)

CASE 1.—Mrs. B., aged twenty-four years, received about a year's ill treatment bodily. Condition as follows: a feeling as if everything was rushing to the head on walking, causing a great deal of heat, sometimes palpitation of the heart, more noticeable in the pit of the stomach, causing a marked depression there, with much burning; soon afterwards a rising of blood in dark lumps, without cough, coming into her mouth; precordial region very sensitive to the touch, causing sharp stitches about the heart; is obliged to lie down, with fainting; appetite wanting, stool hard, menses regular, but less in quantity; looks pale and haggard, is feeble and unable to do anything. Arnica 6th, continued for a week, restored the patient. (64. 26.)

CASE 2.—A man aged sixty-two years, of strong constitution, sanguine-choleric temperament, had the itch when twenty years of age, cured by Sulphur; had never been troubled with any affection of the chest; was attacked with hæmoptysis without any apparent cause, (had taken half a bottle of wine at dinner the day before.) Symptoms: for half an hour spitting of bright-red foaming blood, mingled with small lumps of blood and slime, apparently coming from the large right bronchial tube, as there appeared a slight depression, with a tickling beneath the spot, causing vomiting, flushes of heat, with congestion to chest. During a fit of palpitation of the heart, the expulsion of blood increased. Pulse very small, contracted and slow; face pale, hands and feet cold; at times a tendency to fainting. Arnica 6th effected a cure in three days. (64. 26.)

CASE 3.—M., aged twenty years, had been skylarking, during which his chest was stepped upon. Condition as follows: face deathly pale, cold, complaining of great prostration, with a feeling of faintness; on slight coughing, brought up a quantity of dark blood; stitches and burning heat in the chest; violent palpitation of the heart; pulse very small and frequent; externally painful sugillations, but no fracture. Arnica 6th internally, and Tinct. Arnica with water externally, effected a cure in ten days. (64. 26.)

CASE 4.—M. had a fall from a tree; the night following violent hæmoptysis with a feeling of tightness of the chest; after coughing, expulsion of dark blood at first, followed by about half a pound of bright blood. The next night lost about a pound of dark blood; complains of burning heat under the sternum; pulse rather full. He gradually recovered under the internal use of Arnica 6th, in a period of nine days. (64. 26.)

CASE 5.—H., aged thirty-one years, nervous-sanguine temperament,

has had the itch twice, and two years ago hæmoptysis, from which he is suffering at present. Symptoms: paleness of the face, general malaise, emaciation, cough caused by constant tickling in the larger bronchial tubes, with soreness beneath the sternum; two or three times expectoration of blood during the day; respiratory murmur less distinct in the left lower lobe of the lung; pulse 90. Arnica stopped the hæmoptysis in a few days, and the rest was cured by Ammon.-carb. 30th in two months. (64. 26.)

In Pleurodynia.—Arnica is especially suited to one variety of this disorder; there is a muscular pain, which from its close resemblance to pleurisy, is often mistaken for it; it consists essentially of muscular pain and frequently of cramp in the intercostal muscles; there are few persons who have not had experience with stitch in the side from running, an exertion which involves the fullest action of which the intercostals are capable, both in working the body as it sways about with the alternate flinging of the arms and legs, and from the great effort made to aërate by full inspirations, the increased quantity of blood which is thrown upon the lungs. The intercostals have also a great deal to do in keeping the body erect and turning it from side to side, as well as assisting in respiration; hence weak persons threatened with phthisis, growing persons and delicate women are particularly obnoxious to these pains. They commonly come on at night, or towards evening, or after some unusual exertion, such as sneezing, coughing or laughing; they are not severe at first, but wearing, and as they often come on in the act of turning around in bed, they interfere with sleep; they resemble the genuine pain of pleurisy, as they are always aggravated and often induced sharply by taking a deep inspiration, the sudden catch being decidedly marked. (11.)

The so-called *hysterical pleurodynia* is also a muscular affection; it is so very common, that there is scarcely one young woman in three who escapes it altogether; it is generally situated in the left side, at times in the right, and occasionally in both; it may be attended with swelling, i.e., muscular cramp; the sufferings it causes are often very severe, and occupy the patient's thoughts, to the exclusion of everything else; the pain is muscular, although it is generally regarded as neuralgic, and as one of the symptoms of spinal irritation; it has its seat under the breast, at a spot corresponding to the commencement of the sheath of the rectus muscle, or at a place corresponding with one of the digitations of the serratus magnus and external oblique; it is also met with extending along the margin of the ribs at the points of origin of the external oblique. This pain in the side is frequently attended with another at the insertion of the rectus muscle into the pubis, and at the inner end of Poupart's ligament; these pubic pains are generally mistaken for disease of the womb. (58. 11.)

Back.—Pain in the os-sacrum, as after a violent thrust or fall. The small of the back is painful, as if it had been beaten off. Pain in the small of the back; he felt stitches in that part when coughing, breath-

ing deeply, or walking. Arthritic pain in the back and limbs. Pain as from bruises in the back. Tingling in the vertebral column. Cutting thrusts between the scapulæ, extending into the thoracic cavity, when walking. Pain of the right scapulæ towards the back, as after a violent shock or fall. Cramp-like pain in the cervical vertebræ. cramp-like tensive pain in the muscles of the neck, when sneezing or yawning. Pimple on the side of the neck, which, when touched, is affected with a stinging pain. (1. 26.)

Clinical Remarks.—It is evidently homœopathic to muscular pains and cramps in the muscles of the neck and shoulders, especially in the trapezius and rhomboideus. It is suited against a large proportion of those muscular pains which are so constantly mistaken for the pains of spinal irritation. We should remember that the chief, if not the sole use of the spinous processes is for the insertion of muscles; the spine forms the *point d'appui* for nearly every muscle of the body. Is the head to be kept erect, the muscle springs from the spine; are the scapulæ to be drawn back, the arm to be raised, the shoulder to be moved, the muscles by which these operations are effected arise from the spine; is the body to be kept erect or to be turned, still the muscles use the spine for their centre of operations; are the thighs to be raised by the psoas, the antagonistic muscles of the other side of the spine must be brought into operation, so that the spine may be fixed, and not bent upon the thighs. In short, there is scarcely a motion of the body in which one or more muscles attached to the spinous processes are not brought into operation, and there is, therefore, throughout the whole day an almost constant and unremitting strain upon the fibres by which the muscles are inserted. In weakly and delicate persons, large portions of the muscles of the back will be painful or even tender to touch, and these pains will be constantly mistaken for those of rheumatism, neuralgia and spinal irritation. (58. 11.)

Superior Extremities.—Drawing and aching in the left shoulder, when standing straight. Broad, sharp stitches below the axilla, from without inwards. The arms feel weary, as if bruised by blows, so that he was unable to bend his fingers inwards. Drawing, cramp-like pain in the long bones of the fingers and the fore-arm. Tingling in the fingers. Painful concussion or shock in the arm, as if produced by electricity. Twitches in the left upper arm, as if a nerve were put upon a stretch. Twitchings in the muscles of the upper arm. Intermittent, painfully pressive tearing, apparently in the bone. Tingling in the fore-arms. Tearing pain in the arms and hands. Burning stitches in the fore-arm. Pain as from a sprain, in the wrist, (chest, back, and hips.) Lancinating tearing pain. Tingling and crawling in the hands. Cramps in the fingers. (1. 26.)

Clinical Remarks.—CASE 1.—Mrs. Upsdill, aged sixty, jammed her fingers in a door, causing her great agony. The nails were blue, the parts squeezed very much swollen, and all round the nails puffiness; an effusion of matter appears to surround the nails; she suffers

intense shooting pains, accompanied with some fever and headache. I ordered Aconite and Arnica in alternation to be taken, a lotion of Arnica tincture to be used during the day, and a poultice at night. On the next day the pains were gone. There is a white margin round the nail, the blueness is much diminished, the swelling is lessened. She continued the Arnica, quite recovered, and her nail was saved. (80. 26.)

CASE 2.—A boy while playing with his school-fellows, was thrown violently on a heap of stones; he fell on his right side; his arm and elbow received the shock of the fall. The whole of the arm was swollen, and the pain considerable, but neither fracture nor dislocation. By the internal and external use of Arnica, a cure was effected in a week from the time the injury took place. (80. 26.)

Pain in the hands occasioned by rowing, or any other unusual and fatiguing manual labor, may be relieved by washing them with a solution of Arnica. (80. 26.)

Wounds.—A sharp instrument penetrated a lady's index-finger. The wound did not bleed, but violent plunging soon took place in the finger, with swelling of the veins; the finger became hard, and the pain extended along the fore-arm and the arm as far as the axilla, and the heat was very great in the part which had received the injury. One drop of the Tincture of Arnica dropped upon the wound produced instantaneous relief, and the wound healed without any further application. (80. 26.)

A man, otherwise healthy, having had a severe attack of rheumatism some years ago, was taken very similar after a severe cold. Is lying in bed almost motionless, not able to move either hands nor feet, complaining of violent tearing pain in the limbs. In the toes, fingers, hands, knees, and elbow-joints, a feeling of prickling like needles, and a sensation as if the limbs were going to sleep, alternating with violent tearing pain; appetite and stool wanting, increased thirst, sleep disturbed on account of pain. Arnica Tinct. in water, internally, effected a cure on the third day. (64. 26.)

Inferior Extremities.—Trembling in the lower extremities. Tearing pain in the lower extremities. Pain as from a sprain in the hips, (back, chest, wrists.) Drawing, pressive pain in the left hip-joint. Pain in thighs when walking, as from a blow or contusion. Drawing cramp-like pressure in the muscles of the left thigh, when sitting. Stitches in the knee, (and in both middle-fingers.) The knee-joints have no firmness, they vacillate when standing. Sometimes sudden absence of power in the knees, they bend, whilst the feet are numb and insensible. Pain as after a violent blow, over the calf of the right leg, accompanied by lassitude of the legs. Grinding pain from above downwards in the left calf; the pain then extends into the thigh, thence crossing behind the os-coccygis, and finally terminating at the right iliac bone. Tearing in the heel. Tingling pricklings in the soles of the feet, at one and the same place. Lancinating, tearing,

arthritic pain in the big toe, with some redness. Single shocks in the big toe. Sense as of tingling in hands and feet, and lancinating pains in divers joints. (1. 26.)

Clinical Remarks.—CASE 1.—A young lady, while dancing, ran a splinter into her foot in such a manner, that it could not be extracted by pulling; it was found necessary to remove the subjacent soft parts to extract it. After extraction, the patient took three globules of Arnica, and the foot was bathed in a strong solution of Arnica. In four days the foot was almost well, and no inconveniences have resulted. (80. 26.)

CASE 2.—While jumping out of a carriage, a young lady's foot became entangled, and the horses dragged her along to a considerable distance. The foot was turned outwards. After the reduction of the dislocation, bandages moistened with a solution of Arnica were applied, and in the course of three days she used her foot as usual. (80. 26.)

CASE 3.—A porter, while carrying some weight on his shoulders, slipped in going down the steps. He felt the concussion throughout the whole frame, but especially in one of the joints of the foot. The foot was very painful, and swelled considerable. The symptoms were completely removed in a few hours, by washing the foot with a solution of Arnica. (80. 26.)

Blisters on the feet, occasioned by walking, are easily removed by washing the feet with a solution of the Tincture of Arnica. (80. 26.)

CASE 4.—A man, otherwise healthy, having had a severe attack of rheumatism some years ago, had a return of the disease after a cold, with the following symptoms: Is lying in bed almost motionless, not able to move either hands or feet, complaining of violent tearing pain in the limbs. In the toes, fingers, hands, knees, and elbow-joints, a feeling of prickling like needles, and a feeling as if the limbs were going to sleep, alternating with violent tearing pain; appetite and stool wanting, increased thirst, sleep disturbed on account of pain. Arnica Tinct. in water, internally, effected a cure on the third day. (64. 26.)

Pain in the plantar fascia, and sometimes so complete a stretching of the fascia and the ligaments of the foot so as to destroy the plantar arch, and make the person flat-footed, is common in the weak from too much walking; weakness of the ankle is not uncommon from a similar cause; severe pain at the insertion of the tendo-achillis sometimes occurs, and may be almost permanent. (11.)

In chronic rheumatism.—A powerful young man, aged twenty-three after much exposure and dissipation, was attacked with weakness on the right leg, soon followed by increasingly violent rheumatic pains, and a small painful swelling in the sole of the foot; he recovered in a few weeks and remained well for a year, when he again took cold; violent irritative pains sat in below the tendo-achillis and the inner side of the calcaneus, which prevented walking, followed by a hazelnut sized, hard and painful swelling, not unlike an exostosis; the rheumatic pains gradually extended upwards to the hip, and persisted

for nearly two years, with only occasional periods of relief, notwithstanding the use of all kinds of rheumatic remedies, and nearly two hundred Russian vapor-baths; painful swellings also arose on the back of the hand. He now took one-half of an infusion of zj. and ziss of Flowers of Arnica in six ounces of boiling water, every morning and evening; in eight days he was free from pains in the hand, and in four weeks he was relieved of all his disease; a relapse several months after was removed by the same treatment, and he remained well for two years. (4. 11.)

Vogt recommends it against *old and atonic rheumatisms* occurring in weakly persons, when the membranous parts are especially affected, and exudations and effusions have occurred; also in *arthritis rheumatica* occurring in debilitated persons, even if some fever be present, provided the disease be obstinately localized in some part. In *chronic atonic gout*.

General Symptoms.—Deeply penetrating, dull stitches in the limbs, here and there. Sense as of pricking in the skin. Stitching pains. Fine pricklings in almost every part of the body. Burning and cutting pains here and there. Jerks and shocks in the body, as by the electric fluid. Itching rash, produced by moistening the skin with the tincture. Sudden twitches of single muscles, almost in every part of the body. The pains increase on motion. Twitchings in all the limbs, especially in the feet and shoulders, with heat of the feet. Painful and excessive sensitiveness of the whole body. Heaviness in all the limbs; paralytic pain in all the joints, during motion, as if the joints were bruised. Tremor of the limbs. (1. 26.)

Dr. R. LUDLAM has used a low dilution of this remedy with the most gratifying results in obstinate dysenteries. He found it to relieve an incessant and harassing tenesmus in *plethoric subjects*, better than any other remedy, and especially if the case occurred during the extreme heat of summer. Its value in this direction lacks much of being over-estimated.

ARISTOLOCHIA-SERPENTARIA.

VIRGINIA SNAKE-ROOT.

AUTHORITIES.

Wood and Bache. (7.) Snelling. (46.)

Serpentaria, in old-school parlance, is a stimulant tonic, acting also as a diaphoretic or diuretic, according to the mode of its application. Too largely taken it occasions nausea, griping pains in the bowels, sometimes vomiting and *dysenteric tenesmus*. It is said to be admirably adapted to the treatment of typhoid fevers, whether idiopathic or symptomatic, when the system begins to feel the necessity for support, but is unable to bear active stimulation. In exanthematous diseases in which the eruption is tardy or has receded, and the grade of action

is low, it is thought to be useful by promoting the cutaneous affection. It has also been highly recommended in intermittent fevers. (7. 46.)

Dr. J. W. LUDLAM has been in the habit of employing for many years, a warm infusion of this root as a remedy in obstinate sick-headaches. In debilitated females suffering with this complaint, it frequently affords the most prompt relief.

In convalescence from low forms of fever, it is also a favorite prescription.

These facts are significant to the Homœopath.

Note.—As there are no less than twelve species of *Aristolochia* noticed in the U. S. Dispensatory, it may be well for the practitioner to pay particular attention to the description of the plant, in order to avoid confusion. “The *A.-Serpentaria* is an herbaceous plant with a perennial root, which consists of numerous slender fibres proceeding from a short horizontal caulx. Several stems often rise from the same root. They are about eight or ten inches in height, slender, round, flexibose, jointed at irregular distances, and frequently of a purple or reddish color at the base. The leaves are oblong, caudate, acuminate, entire, of a pale yellowish-green color, and supported on short petioles at the joints of the stem. The flowers proceed from the joints near the root, and stand singly on long, slender, round, jointed peduncles, which are sometimes furnished with one or two small scales, and bend downwards so as nearly to bury the flower in the earth or decayed leaves. There is no calyx. The corolla is of a purple color, monopetalous, tubular, swelling at the base, contracted and curved in the middle, and terminating in a labiate border, with lanceolate lips. The anthers six or twelve in number, are sessile, attached to the under part of the stigma, which is roundish, divided into six parts, and supported by a short fleshy style upon an oblong angular, hairy, inferior germ. The fruit is a hexangular, six-celled capsule, containing several small flat seeds. The plant grows in rich, shady woods, throughout the Middle, Southern, and Western States. It flowers in May and June.” (7. 46.)

ARMORACIA.

HORSE-RADISH.

AUTHORITIES.

Pereira's Mat. Med. (3.) Wood's Therapeutics and Pharmacology. (88.) King's Dispensatory. (100.) Wood and Bache. (7.) Watson. (27.)

EMPIRICAL OPINIONS.

It is regarded as stimulant, emetic, diuretic, anti-scorbutic, and rubefacient. (100.)

GENERAL EFFECTS.

It promotes the secretion of urine, causes the patient to perspire, and its odorous emanations cause copious secretions from the lachrymal glands.

An infusion of this substance may be taken to produce vomiting in cases of poisoning by narcotic substances.

Nose and Eyes.—*Armoracia* causes increased secretion from these parts, and is homœopathically curative in catarrhal affections of these organs. (27.)

Larynx.—This article specifically affects the larynx, and experience has demonstrated that it is very serviceable in some forms of hoarseness. (3.)

Stomach.—It produces vomiting.

Clinical Remarks.—Useful as a condiment in enfeebled states of the stomach. (7.)

Kidneys.—Increases the secretion of urine.

Clinical Remarks.—Has been used in dropsy, attended with a feeble state of the system, impaired digestion, and an atonic condition of the kidneys. (7.) Said to be peculiarly adapted to dropsical affections occurring in drunkards. (88.) An infusion of the root in cider, drank freely, and as warm as can be borne, while the patient is kept warmly covered up, has caused copious diuresis and diaphoresis, and cured dropsy in a few weeks. (100.)

ARSENICUM-ALBUM.

ACIDUM ARSENIOSUM. (U. S.) ARSENICI OXYDUM ALBUM. (D.)

Arsenious-acid. Arsenic. White Arsenic. White Oxyde of Arsenic.

As. O₃., equivalent 1240. 1 or 99. 34.

AUTHORITIES.

Hahnemann. (1.) Pereira. (3.) Peters' Dis. of Married Females. (11.) Peters' Dis. of Eye. (11.) Wilson on Skin. (72.) Hartmann. (70.) Watson, of Utica. (54.) Christison on Poisons. (9.) Ranking's Abs. (13.) British and Foreign. (18.) American Jour. of Med. Sci. (17.) London Lancet. (52.) Wharton and Stille. (39.) L'Art Medicaire. (73.) British Journal of Hom. (12.) Dierbach's Mat. Med. (6.) Jahr. (32.) Noack and Trinks. (19.) North Am. Jour. of Hom. (67.) Frank's Magazine. (4.) Waring's Therapeutics. (44.) Orfila. (2.) Teste's Mat. Med. (36.) Marcy. (10.) Füllgraff. (26.) Snelling. (46.) Trousseau and Pidoux. (38.) Peters. (11.)

GENERAL REMARKS.

Arsenic belongs among the electro-negative, or acid minerals; it is found in many countries, but not in very large quantities; among the European countries, Germany is most celebrated for its production of Arsenic, although it is also found in Spain and Sweden. Occasionally it occurs in a pure form, but more frequently in combination with Cobalt, Nickel and Iron, and still more frequently with Sulphur; at times it is combined with volcanic products. (6. 11.)

Native Arsenic (*Arsenicum-nativum*) is found in Saxony, in the Hartz mountains near Andreasberg, in Alsatia, Hungary, Norway, and Siberia; it is also prepared artificially by roasting Arsenical-pyrites in a retort; the so-called Cobalt-pyrites is a combination of Arsenic with Metallic Cobalt. (6. 11.)

Metallic Arsenic forms two native sulphurets, viz., *Orpiment* and *Realgar*. (3. 11.)

ORPIMENT, or *Yellow Arsenic*, or *Arsenicum-citrinum, seu flavum, vel luteum*, is a vulgarization of the term AURIPIGMENTUM; it is also called the *Yellow Sulphuret of Arsenic*, or *Arsenicum Sulphuratum Citrinum*. It is found in its natural state in Hungary, Tyrol, Transylvania, &c. *Persian Orpiment*, which is brought to Europe by way of Smyrna, is much prized for its internal metallic golden lustre; Chinese Orpiment, and that of Hungary, Bosnia and Servia, is less prized. (6. 11.)

False, or artificial Orpiment, also called *Kings-yellow*, or *Gold-yellow*, is prepared by sublimating one part of Sulphur with two parts of White Arsenic; it is a much more violent poison than the natural or fossil Orpiment. (6. 11.)

The other Sulphuret of Arsenic, is called *Red Arsenic*, *REALGAR*, or *Sandaracha*; also *Red Sulphuret of Arsenic*, *Sulphuretum Arsenici rubrum*, &c. The finest specimens are found in Transylvania, although it is also met with in the Hartz mountains, Hungary, Bohemia, in the neighborhood of Etna, Vesuvius, and other volcanoes; also in China and Japan. It has a scarlet-red color, which in some specimens is tinged with yellow or brown. (6. 11.)

An artificial red Arsenic, or Realgar, is prepared in Germany by the distillation of Sulphuret of Iron, or Sulphur-pyrites, or crude Sulphur with Arsenic-pyrites. Red Arsenic is less poisonous than the yellow; and the natural less so than the artificial. (6. 11.)

As the word *Pyrites* has often been used, it may be well to give Webster's and Dana's definition. It is derived from a Greek word, meaning *fire*, and is defined as a combination of *Sulphur* with Iron, Copper, Cobalt, or Nickel, presenting a white or yellowish metallic lustre. The term was originally applied to the Sulphuret of Iron, in allusion to its giving sparks with steel. The sulphurets of other metals, or those of Copper, not presenting the colors stated, are not termed PYRITES. (11.)

Clinical Remarks.—We translate from Trousseau and Pidoux's

Materia Medica, the following ancient uses of Arsenic. Two preparations were then in use, neither of them the white oxide or arsenious acid, (which is now officinal with us,) viz, the yellow sulphuret, or *orpiment*, and the native red sulphuret, or *realgar*. (46.)

Under the name of *Arsenic*, the ancients understood only orpiment, the *yellow Sulphuret of Arsenic*. At the present day, and indeed for a century past, we have been in the habit of designating as *Arsenic*, par excellence, only the white oxide or arsenious-acid. Dioscorides is the first whom we find treating of the arsenical preparations. (περί τῆς ἰατρικῆς lib. 5, Cap. 121, 122.) Under the name of Ἄρσενικον, (*Arsenic*), he speaks evidently of the native yellow Sulphuret of Arsenic (*Orpiment*) mingled, according to Harles, (*de Arsenici usu in medicinâ*, Norimb, 1811, p. 50.,) with a certain quantity of Arsenious-acid; and under the name of σανδαράκη, (*Sandaracha*), he speaks of the native red Sulphuret, (*Realgar*.) He says, *Arsenicum vim habet septicam, stypticam et escharoticam, cum morsione violenta; simul constringit, et capillos demit. Sandaracha easdem habet vires ac prius: meditur alopecie et leprotico ungui, cum pice juncta, nec non phthiriasi, oleo mixta. Prodest itidem contra narium orisque ulcera, reliquaque exanthemata cum oleo rosarum administrata; æque ac contra condylomata. Datur quoque pulmonum suppuratione laborantibus, cum mulso. Suffitio etiam, addita resina, administratur adversus tussim inveteratam, vapore ipsius per siphonem ore sucto. Cum melle propinata vocem clarificat, et asthmaticis in potione cum resinâ porrigitur.** (38. 46.)

* Arsenic has a septic, styptic and escharotic power; (the latter being a peculiarly violent mordent action,) and at the same time, while it constricts, it empties the capillaries. Sandaracha has the same powers, though perhaps in a greater degree. When combined with pitch, it will relieve baldness and leprosy, and combined with oil, it also relieves pityriasis. It is successfully used also against ulcers implicating the mouth and nares, and when combined with oil of roses, is very successful in the exanthemata; as well also in condylomata. It is also given in suppuration of the lungs, carefully mixed with water, wine and honey. It is successful also combinad with pitch, in inveterate chronic coughs, the vapor being inhaled into the lungs through a tube. Drunk with honey, it will clear the voice; and combined with pitch, it may even be used as a potion for asthmatics. (46.)

Realgar, as may be seen from this passage, was much more used in medicine than Orpiment, probably because its poisonous properties were a little less active. The authors who follow Dioscorides, the Arabs and "*Arabists*," have also generally preferred the realgar or red Sulphuret, (*Sandaracha*), to Orpiment, or yellow Sulphuret, (*Arsenic*.) (38. 46.)

We find also in Pliny, therapeutic indications for the use of Arsenic. * *Sandaracha valet purgare, sistere, excalefacere, perrodere. Summa ejus dos styptica.* Celsus (*De Re Medica*, lib. 5, cap. 5,) Galen (*De simpl. med. facult. passim.*), Scribonius Largus, (*Compos. medic.*, 123, 226, 237,) copy Pliny and Dioscorides. Cælius Aurelianus (*Morb. Chron.*, lib. 4, cap. 3,) among other qualities of Orpiment, mentions its power of killing intestinal worms, and of curing "*cæliac*

maladies," when administered in enema. And in fact, all authors down to the Arabs, including the Galenists, concur in according to Orpiment, and especially to Realgar, the properties mentioned by Dioscorides. (38. 46.)

* Sandaracha is purgative, heating, escharotic, and lasting in its effects, but above all other qualities stands its styptic properties. (46.)

It will be seen that the ancients were acquainted with many of the principal medical uses of Arsenic; viz., against leprosy, malignant ulcerations, chronic bronchitis, phthisis, chronic skin-diseases, asthma, &c. What would Dr. Hunter say to its use by inhalation? (11.)

The Arabs, Rhases, Mesue, Serapion, Janus de Damas, and Avicenna, (or more properly Abu-ebn-sina) vaunted Arsenic, undoubtedly from their own experience, but partly also, perhaps, on the faith of Galen. *Arsenici omnes species calendæ* (calentæ, ? Eds.,) *sunt, et comburentes. Medentur scabiei, et ulceribus putridis, et lepræ ulcerosæ, herpeti præterea esthiomeno et pediculis, nec non asthmali, si vel cum illo suffumigatio aut epithema fiant.* (Rhazes, *De Re Med.*, lib. 3, cap. 33.)* (38. 46.)

* All the preparations of Arsenic are hot and burning, (escharotic.) They cure the itch, putrid ulcers, herpes exedens, lice, and even asthma, if inhaled, or used as an epithem. (46.)

Avicenna uses very much the same language. *Omnes species Arsenici escharoticæ sunt, antisepticæ. Arsenicum citrinum et rubrum abradit pilos, et convenit alopecie. Fit ex eo emplastrum ad vulnera. Cum adipe et oleo confert scabiei et ulceribus sahafat (lepræ ulcerosæ) et putridini ad cutem; abstergit uritque. Ceratum factum ex eo, confert contra herpetem esthiomenon ulcerosumque in ore et in naso. Datur quoque in potionibus cum hydromele ad pulmonis suppuratos et tussim antiquam sputumque sanguinis et saniei, quandoque etiam in pilulis contra asthma, et, in clysteribus, contra hæmorrhoides ani.* Canon., lib. 11, tract. 11, cap. 49.)* (38. 46.)

* All the preparations of Arsenic are escharotic and anti-septic. Arsenicum-Citrinum and Rubrum are depilatories, yet are suitable in baldness. A plaster suitable for wounds, is also made of Arsenic. With lard and oil it is beneficial in the itch and lepra ulcerosa, and to gangrenous ulcerations of the skin. It is an abstergent and escharotic. An ointment is made from it, curative to creeping herpes and ulcers in the nose and mouth. It is given also in the form of draught combined with honey for old coughs, expectoration of pus, bloody and sanious sputa; sometimes even in pill for asthma, and in clyster for hæmorrhoids of the anus. (46.)

Later the Arabians themselves scarcely employed Arsenic. We hardly find in the writings of the physicians of the fifteenth and sixteenth centuries any mention of this medicament. Theodore employed it solely against ulcerating scrofula. Guy de Chauliac for the purpose of making an eschar in hydrocele. (38. 46.)

However, after the sixteenth century, the epoch in which medicine like all the other sciences was making an effort to emerge from the night and darkness of the middle ages, the external use of Arsenic was somewhat revived; but it was but seldom that a practitioner dared

recommend its internal exhibition. Von Helmont counselled the use of the arsenical preparations in the treatment of ulcers; but he formally proscribed its use internally. Tagault indicates in the most explicit manner the use which should be made of it in the treatment of CANCER. *Arsenicum ad curandos tumores ulcerantes externe primatum abinet, modo quis noverit eo recti uti.* "Arsenic applied externally for the cure of ulcerating tumors, deserves the highest place—a use of it which has lately been most properly revived." Lemery (Cours de Chimie,) Wepfer (Cicut. aquat. hist.) notice only to condemn the essays which had appeared recommending the internal exhibition of Arsenic, and above all, reprehending its use in intermittent fever. In the course of the eighteenth century, however, a multitude of writers appeared to defend its claims as a febrifuge; but Stoerck, who had called the attention of the profession to the utility of so many *vegetable poisons*, arrayed himself against it with singular animosity. It aroused in the mind of the medical public a greater prejudice against poisonous preparations than would have been thought possible. (38. 46.)

Arsenic then fell for some time into profound discredit, whence it was rescued by Fowler and some other English physicians at the end of the last century. (38. 46.)

Lastly in our own day, Harles, whose interesting monograph many are familiar with, has essayed to re-establish it in the favor of the medical world. (38. 46.)

Arsenious-acid, commonly termed White Arsenic, is first distinctly mentioned by Geber. (3. 11.)

It will be seen that the ancients recommend it in itch, leprosy, herpes, simple and gangrenous ulcerations, chronic coughs, suppuration, phthisis, asthma, *hæmorrhoids*, *cancer*, intermittent fever, &c., &c. Hahnemann's intimate acquaintance with the writings of ancient medical authors led him to revive much of their experience, and made his own experiments with drugs upon the healthy infinitely more suggestive to him than they possibly can be to his less learned followers. (11.)

Besides the two native *Sulphurets*, viz., *Orpiment* and *Realgar*, there are two native compounds of Arsenic with Oxygen, viz., Arsenious and Arsenic-acids. (3. 11.)

The ARSENIUS-ACID, or *White Arsenic*, is the one we are more particularly interested in; it is prepared in large quantities in Silesia, Bohemia, Saxony, and at Cornwall in England. It is manufactured on a large scale at Altenburg and Reichenstein in Silesia, from the ore called Arsenical Iron, or *Mispickel*; in Cornwall it is prepared from the White Mundic, or another variety of *Mispickel*, found with Tin ore. Arsenical Iron is also found in many localities in Connecticut, but more particularly in New-Hampshire, and is not rare in any of the New-England States, or wherever *pyritous ores* are found along the range of the primary rocks of the Appalachian chain; but we do not know that Arsenic is prepared in any quantity in the United

States. Arsenious-acid is also found in the ashes of many plants, in certain soils and in some mineral waters. (3. 11.)

The Altenburg Arsenical Iron is composed of Sulphur 20.65, Iron 35.62, and Arsenicum 43.73. The Reichenstein Arsenuret of Iron is composed of Sulphur 1.77, Iron 32.25, and Arsenic 65.88. (3. 11.)

After being reduced to powder, the Arsenical Iron ore is roasted in a muffle furnace by which the Arsenicum is converted into Arsenious-acid, which is conveyed in the state of vapor, called FLOWERS OF ARSENIC, *Hüttenrauch*, or *Smelting-house smoke*, by the Germans, into a condensing chamber, where it is deposited in a pulverulent form, and in this state is called *Rough Arsenious-acid*, *Gift-mehl*, or *Poison-flower*, by the Germans. (3. 11.)

This rough or crude Arsenious-acid is refined by sublimation; the product is a glassy mass, called *Glacial White Arsenic*, or *Weissen Arsenik-glas* by the Germans, which is sometimes purified by a second or third sublimation. If it contain any Sulphuret of Arsenicum, a little Potash is mixed with it, to prevent the sublimation of the Sulphur. (3. 11.)

In Cornwall, the rough Arsenious-acid is deposited in the long horizontal flues of the burning-houses employed in smelting tin ore. From these burning-houses it is brought to the Arsenic works, from all parts of Cornwall. It is first separated from the Sulphur in a common reverberatory furnace, but having an unusually long flue. The heat applied is low at first, so that the Sulphur is dissipated before the Arsenic is volatilized; then the heat is gradually increased; afterwards the fire is extinguished and the Arsenic removed from the flue. (3. 11.)

Arsenic, as all chemists are aware, combines with Oxygen in three proportions, forming Sub-oxide of Arsenic AsO_2 , Arsenic-acid AsO_5 , and Arsenious-acid AsO_3 . The latter is by far the most important in its chemical, commercial, and medical relations. It is usually obtained from Arsenical Pyrites and Arsenical Cobalt by roasting them in reverberatory furnaces, condensing the vapors, and then submitting their results to a second sublimation. (10.)

Its specific gravity is about 3.6, (3.529, Taylor,) and 100 parts of boiling water dissolves 9.68 parts of it. It is also soluble in Alcohol, and in oils. It has an insipid, sweetish taste, but leaves upon the palate an acrid sensation. When put on ignited charcoal it evolves a vapor having an odor like garlic. These facts with regard to specific gravity, solubility, taste and odor are noted in all chemical works as common and familiar to all,—as with alcohol and other similar substances. We have personally verified these facts. (10.)

Traces of Arsenious-acid have been detected in Tartar-emetic, Phosphate of Soda, Sulphuric, Phosphoric, and Hydrochloric-acids, and occasionally in human bones, in the form of Arseniate of Lime, and in the Phosphoric Salts which are found in the blood. In the two last instances, the quantity of Arsenic which now and then natu-

rally takes the place of Phosphorus, is very small; but a knowledge of the fact is of considerable importance in a medico-legal point of view. (10.)

Some of the above statements are doubtless correct; but others made the chemical experiments by which they were established. It was at one time supposed, upon the authority of Orfila, that Arsenic was a natural constituent of the human body, but his own admission of his error many years ago, (in 1842,) and repeated subsequent trials, by Lehman and others, have proved that this is not the case; it exists neither in the bones or the soft parts. (39. 11.)

TOXICOLOGICAL EFFECTS.

The effects of excessive doses of Arsenious-acid upon different individuals are by no means uniform. It may destroy life by producing gastro-enteritis, with its usual phenomena of vomiting, purging, burning pains in the throat, stomach, and intestines, heat, constriction, dryness and tightness of the throat, with intense thirst, difficult deglutition, small, feeble, rapid and irregular pulse, tenseness and hardness of the abdomen, with pain on pressure, short and laborious respiration, cold clammy sweats, dry and sometimes coated tongue, anxiety, extreme restlessness, and great prostration of the entire forces of the system. (10.) Or it may expend its power chiefly upon the cerebro-spinal and vascular system, giving rise to faintness, trembling, syncope, paralysis, convulsions, spasmodic twitchings, delirium, insensibility, and coma. (10.)

A more full and accurate account of Christison and Pereira's opinions of which the above is a short abstract, will be given subsequently; in the meantime as we happen to possess a copy of Hahnemann's original treatise on Arsenic, published in 1786, we will give Hahnemann's views. It may be well to add that the treatise of Harles, of which Trousseau and Pidoux think so highly, that they follow and copy it quite servilely, is based on that of Hahnemann. This little duodecimo of 276 pages is characterized by that immensity and accuracy of learning which distinguished Hahnemann's earlier writings, and is not surpassed by that of his well-known treatise on Hellebore. Among the authorities consulted by Hahnemann, were Bergmann of Vienna (1783), Navier of Paris (1776), Scheele of Sweden, Logan of St. Petersburg (1783), Aucante (1775), Gagliani of Italy, Plenk's Toxicology, Hoffmann's Med. Rat. System, Wepfer's Toxicology (1733), Haller, Gmelin, La Force (1716), Letters of Madam de Sevigne, on the poisonings of the Marchioness de Brinvilliers, Merveau, Maret and Durande of France, Paracelsus, edition of 1679, Bonet, Van Helmont, Stahl, Storck, Peter von Abano, Sala, Sennert, Musgrave, Brocklesby of England, Rounow's Swedish Transactions (1778), Alphonius and Massaria of Italy, Amatus Lusitanus, Baccius, Borelli, and at least twice as many more authorities of all ages and languages. (11.)

Hahnemann's 3d chapter is devoted to the consideration of three degrees of poisoning with Arsenic.

The first degree is, where a large quantity is taken under circumstances favoring its full effect; viz., on an empty stomach, or with heating liquors, in persons with irritable nerves and choleric temperaments, subject to spasmodic and inflammatory affections, or shattered by anger, grief, jealousy, or fear, overloaded with acrid bile, or affected with chronic disease. (1. 11.)

If several or many of these favoring influences are present, the most violent and rapidly fatal form of arsenical poisoning, in the first or highest degree will occur, and death may ensue in from three to thirty hours. (1. 11.)

Symptoms : 1. The poisoned person first experiences a cold shuddering, which seems to pervade the whole body; while an inexpressible anxiety, or nausea, which seems to oppress the chest as well as the stomach, a cold deathlike sweat, and a general trembling of the limbs, alternate with one another in frequent paroxysms. (1. 11.)

2. The hands, feet and tip of the nose become cold, blue circles form around the eyes, while the oppressed pulse gains in hardness and quickness. (1. 11.)

3. Now follow violent attempts at vomiting, which although very forcible are not fruitful at first, and finally become almost ineffectual from spasmodic closure of the cardiac orifice, and emptiness of the stomach of everything but Arsenic, which is tenaciously plastered on its walls. The patient complains of burning and tearing pains in his throat, œsophagus and stomach, and knows not what to do with himself.

4. The Arsenic continues to ravage and destroy the stomach without compelling it to full and beneficial vomiting; it clings fast to the villi of the mucous membrane, and contracts it as boiling water would, and irritates the bloodvessels to progressing inflammation, without having previously induced beneficial and judicious evacuations. The whole nervous system trembles and struggles, and we see greater evidences of involuntary or intentional destruction than of prosperous reaction. Nature seems to feel her dreadful enemy too oppressively to gather strength and courage to oppose and overcome it, yet she attempts it from time to time in repeated ineffectual struggles.

5. The fruitless retchings, the fever, the frightful chills, the anxiety, the internal heat and unquenchable thirst increase; the breathing becomes quicker and hotter, more spasmodic and violent; and the glistening eyes project from their sockets. The inexpressible anxiety, and the burning, rending and overpowering pain in the epigastrium tortures the patient with a progressive increase. (1. 11.)

6. At first the abdomen is contracted; afterwards when inflammation and irritation of the stomach, liver and spleen occur, it becomes hot and distended; the attempts at vomiting become irresistible and incessant; the panting and gasping lungs, the dry parched tongue, and gaping mouth seek refreshment from cool air and water. The

stools and urine are suppressed ; the vomits have a disgusting smell and color, and may be mixed with blood. Cutting and griping pains in the bowels ensue, especially around the navel ; the patient is beside himself, so that he does not hear and see correctly, while his expression is frightfully anxious and fearful. (1. 11.)

7. We now see evidences of the omnipotence of the corrosive destroyer, which persists in its internal ravages without check or mercy, in the livid frothy lips, the swollen and trembling tongue, the agonizing expression of the bloated face, the viscid sweat on the cold forehead, and the lead-colored circles around the staring eyes. (1. 11.)

8. The miserable sufferer no longer looks like himself, but seems a wretched and tortured stranger from another sphere ; he screams frightfully, or wimpers despairingly in broken or angry words for help from agony, fire and death ; then tosses and struggles violently. (1. 11.)

9. Soon after this we see signs of loss of feeling and sensation ; he becomes more quiet ; his breast heaves less frequently ; the vomiting ceases ; his black parched lips tremble, and his pulse becomes extinguished, and involuntary putrid stools of a most offensive smell and appearance occur. (1. 11.)

10. The pupils dilate ; the death-rattle is heard in the throat of the dying and unconscious sufferer ; jerks and spasms convulse his stiffening limbs, and icy-cold features ; his stertorous breathing becomes fearfully slower and slower, and finally with a last spasmodic gasp a ghastly corpse alone is left, the staring eyes and gaping mouth of which fill us with horror. (1. 11.)

The first stage of the affection as described in paragraphs 1 to 5, occupies about one-half of the whole duration of the attack ; the second stage, described in paragraphs 6 to 8, about three-eighths of the last half ; and the last stage (see paragraphs 9 and 10) occupies only the last eighth of time. All the sufferings are increased if acids, stimulating drinks, or Opium are used. (1. 11.)

In Hahnemann's *second degree* of poisoning with Arsenic, life may persist for several days, and requires more than four grains of white Arsenic to produce it ; it is most apt to occur in not very impressible, fully grown and not unhealthy persons, especially those who have much mucus in their stomachs, or have taken food just before or with the Arsenic, or have drank freely of simple diluent drinks, and have not been harassed with aggravating mental troubles.

He does not give a very full account of this degree ; simply states that the phenomena are similar to those of the first degree, only they occur less rapidly, have various less violent episodes, and intercurrent remissions. The inflammation of the stomach and neighboring parts, the contraction and cauterization of the mucous coat of the throat, stomach and bowels seems to take place more slowly and interruptedly, apparently from the gradual solution of the little Arsenic which has got into, or remains in them. (1. 11.)

The anxiety, oppression of the chest and the retchings are more intermitting, and not so oppressive and suddenly overwhelming ; the

fever increases, still it has some remissions; the cutting, gnawing and burning sensations of the first degree, are more intermixed with twisting, aching, colicky, griping and gnawing pains; the face swells more; the abdomen is harder; and vesicles, like aphthæ, arise in the mouth. But more especially, this second degree is characterized by more frequent, offensive and bloody discharges from the bowels, with gradually increasing gripings, and less frequent vomitings. The strength of the patient fails more gradually, and his consciousness remains until the last, when convulsions may occur, and an incessant hiccough, which admits of no palliation or relief. But this degree has peculiar agonies, which are sometimes wanting in the first; as the pains are less severe and constant, there is more opportunity for the occurrence of remorse, despair, grief, contrition, and other mental emotions which harass the soul. The strange admixture of bodily pain and mental agony, often finishes what the poison alone was too weak to accomplish, and the more stealthy approaches of death are aided by regret for the past, and hopelessness for the future. (1. 11.)

If the patient receives only moderately good treatment this second degree may pass over into the *third*, in which death does not occur, but a long-lasting chronic disorder ensues. Remitting, but oft-recurring cramps occur in the limbs, but especially in the feet; repeated paroxysms of fever set in, attended with colic-pains, spasmodic contraction of the abdomen, intermixed with headache, heat and thirst. After one of these feverish attacks, in which both vomiting and diarrhœa are apt to recur, the whole remaining force of the poison is apt to be thrown upon the limbs; they become *paralyzed*, or so much contracted, that the patient cannot extend them, at least not the legs. If proper evacuations are neglected, the irregular attacks of fever return more frequently, the pulse becomes intermitting, the eyes become dim or fixed and sallow, the mouth bitter, the headache and oppression of the heart and chest insupportable, and the contracted limbs are visited with burning, itching neuralgic pains, somewhat similar to those of gout, but not followed by alleviation of the other symptoms. These may be succeeded by a very violent attack of fever, and a miliary eruption over the whole body, the vesicles of which often become confluent and contain an exceedingly acrid fluid. At times the whole affection is terminated happily by one of these critical fevers and eruptions, but more frequently it is not, and the whole aggregate of sufferings is increased, because the remains of the unantidoted, or unremoved poison is still too great. In the latter case, the contractions of the limbs are followed by absolute paralysis; the gout-like pains still rage violently, but the eruption dries up, and the skin peels off; the surface remains tender for a long time; the limbs, especially the feet, swell; the irregular attacks of fever still recur, and are attended with stomach-ache and colic; palpitations are not uncommon, and opisthotonos, or the eclampsia of Sauvage, in which there is violent bending of the body backwards, with convulsions and retention of consciousness, may occur. The patient may recover from

this, but remain feeble, cachectic, with irregular febrile chills, oppression of the stomach from the slightest food or drink, or with attacks of vomiting directly after meals, bitter, unpleasant taste in the mouth, pains in the head, dryness of the skin, burning in the palms of the hand, yellowness of the skin and eyes, painful and irregular discharges from the bowels, restlessness, dejection of spirits, dropsical swellings, night-sweats, &c. All these symptoms point to the scaling-off of eschars, and consequent suppurating patches in the stomach or bowels. If these corrosions were not very deep, they may heal over and the patient finally recover.

The thoughtless and excessive use of Arsenic by careless physicians may lead to somewhat similar results to those produced by the intentional poisoning with Aqua-toffana. There may be gradual emaciation, a nameless and indescribable ill feeling, loss of strength, slight, almost imperceptible and irregular attacks of fever, sleeplessness, disgust for food and drink, and for everything pleasant in life, and a cachectic appearance; the scene may be closed by dropsy, black miliary eruptions, eclampsia, or colliquative sweats, or diarrhœa. (1. 11.)

It should be borne in mind that Hahnemann was but thirty-one years of age, when the above careful and graphic description of the effects of Arsenic was given. He has described the gastro-enteric and *paralytic* varieties of arsenical poisoning with great truthfulness. He has not dwelt so fully upon the more obscure and larvate forms as some later writers have done. (11.) Christison says: The symptoms of poisoning with Arsenic may be advantageously considered under three heads.

1ST CLASS.—In the *first* set of cases there are signs of violent irritation of the alimentary canal, and sometimes of the other mucous membranes also, accompanied with excessive general depression, but not with distinct disorder of the nervous system. When such cases prove fatal, which they generally do, they terminate for the most part in from twenty-four hours to three days. (9. 46.)

2D CLASS.—In a *second* and very singular set of cases, there is little sign of irritation in any part of the alimentary canal, perhaps trivial vomiting or slight pain in the stomach, but sometimes neither; the patient is chiefly or solely affected with excessive prostration of strength and frequent fainting; and death is seldom delayed beyond the fifth or sixth hour. (9. 46.)

3D CLASS.—In a *third* set of cases, life is commonly prolonged at least six days, sometimes much longer, or recovery may even take place after a tedious illness; and the signs of inflammation in the alimentary canal are succeeded or become accompanied, about the second or fourth day or later, by symptoms of irritation in the other mucous passages, and more particularly by symptoms indicating a derangement of the nervous system, such as *palsy* or *epilepsy*. The distinctions now laid down will be found in practice to be well de-

fined, and useful for estimating in criminal cases the weight of the evidence from symptoms. (9. 46.)

1ST CLASS.—In those cases where inflammation of the primæviæ is the prominent symptom (the most frequent of all), the person commonly survives about twenty-four hours, seldom more than three days; they have proved fatal in a few hours, and others have lasted for weeks. On the whole, if the case is much shortened, or lengthened, its complexion is apt to be altered. In the mildest examples of this variety, recovery takes place after a few attacks of vomiting and slight indisposition for a day or two. (9. 46.)

In regard to the ordinary progress of the symptoms, the first of a decisive character are *sickness and faintness*. In some instances the sickness and faintness, particularly where the poison has been in solution, have begun a few minutes after it was swallowed. Thus in a case mentioned by Berndt, in which a solution of Arseniate of Potass was swallowed, the symptoms began violently in fifteen minutes; in one related by Wiedberg, where the oxide was given in coffee, the person was affected immediately on taking the second cup; in another the patient was taken ill in eight minutes; in one mentioned by Lachèse, of Angers, violent symptoms commenced within two minutes after the poison was swallowed in prunes; in a case communicated to me (Christison) the symptoms set in with violence ten minutes after it had been taken dissolved in tea; and in a case of poisoning with orpiment in soup, mentioned by Valentini, the man felt unwell before he had finished his soup and set it aside as disagreeable. It is a mistake, therefore, to suppose, as I have known some do, that Arsenic never begins to operate for at least half an hour. Nevertheless it must be admitted that, in general, Arsenic does not act for half an hour after it is swallowed. On the other hand, its operation is seldom delayed beyond an hour. Lachèse, however, quotes an instance, when the interval was two hours, and where the issue was fatal. The Arsenic had been in very coarse powder. Mr. Macaulay, of Leicester, has communicated to me (Christison) a case, where the man took the poison at eight in the evening, went to bed at half past nine, and slept till eleven, when he awoke with slight pain in the stomach, vomiting and cold sweats. In this instance the dose was seven drachms, and death took place in eleven hours. (9. 46.)

Professor Orfila has noticed an instance, where there appears to have been scarcely any symptom at all for five hours. The case of a Mrs. Smith, tried in Edinburgh, in 1827, is probably another of the same kind. A white draught was administered in a suspicious manner at ten o'clock in the evening; the girl went immediately to bed; and no symptom appeared till six next morning, from which time her illness went on uninterruptedly. In two of the preceding cases it will be remarked that sleep intervened between the taking of the poison, and the invasion of the symptoms. It is, therefore, not improbable that the retardation of the symptoms is due to the inactivity of the animal system during sleep. There is a limit, however, to the pos-

sible interval in such cases. It seems impossible that the action of the poison should be suspended for three entire days. Yet death has been ascribed to Arsenic in such circumstances. A child three and a half years old, having swallowed eight grains with bread and butter, but being made forcibly to vomit by emetics, presented no decided symptom at the time, or for three days more; but on the fourth day difficult breathing ensued, with anxiety of expression, frequency of the pulse and heat of the skin; and next day death took place. There was no morbid appearance found in the body, and Christison says, commenting upon the case, that he cannot admit that the poison was the cause of the symptoms and the fatal event. (9. 46.)

Soon after the sickness begins or about the same time, the region of the stomach feels painful, the pain being of a *burning* kind, aggravated by pressure. Violent fits of vomiting and retching then ensue, especially when drink is taken. There is often also a sense of dryness, heat and tightness in the throat, creating an incessant desire for drink, and this affection often precedes the vomiting. Occasionally it is wanting, at other times so severe as to be attended with suffocation and convulsive vomiting at the sight of fluids. *Hoarseness* and difficulty of speech are commonly combined with it. The matter vomited is *green* or *yellow*, but sometimes streaked or mixed with blood, particularly where the case lasts longer than a day. (9. 46.)

In no long time after the first illness, *diarrhœa* makes its appearance, but not always. In some cases, instead of it, the patient is tormented by *frequent ineffectual calls*; in others the great intestines are scarcely affected. About this time the pain in the stomach is excruciating, and is often likened by the sufferer to a *fire burning* within him. It likewise extends more or less downwards, particularly when the *diarrhœa* or *tenesmus* is severe; and the belly is commonly tense and tender, sometimes also swollen, though not frequently, sometimes even, on the contrary, drawn in at the navel. When the *diarrhœa* is severe, the anus is commonly excoriated, and affected with burning pain. In such cases the *burning pain* may extend along the whole course of the alimentary canal from the throat to the anus. Nay, at times the lips and mouth are also inflamed, presenting dark specks or blisters. (9. 46.)

Sometimes there are present, likewise, signs of irritation of the lungs and air-passages—almost always *shortness of breath*, (which, however, is chiefly owing to tenderness of the belly)—often a decided sense of tightness across the bottom of the chest, and more rarely decided pain in the same quarter, darting through the upper part of the chest. Sometimes *pneumonia* has appeared a prominent affection during life, and been distinctly traced in the dead body. (9. 46.)

In many instances too, the urinary passages are affected, the patient being harassed with *frequent painful and difficult micturition*, swelling of the penis, and pain in the region of the bladder, or if a female, with burning of the vagina and excoriation of the labia. Sometimes the irritation of the urinary organs is so great as to be attended with total

suppression of urine. During the late contentions among chemists, physiologists, and physicians, the most contradictory statements have appeared. Flandin and Danger alleging that it is always *suppressed*, Orfila that it is always secreted, and Delafond that it is never suppressed, but *always diminished, sometimes to one-sixth of its normal amount.* There is, however, no invariable rule in this matter, and in fact, urinary symptoms are seldom present unless the lower bowels also are strongly irritated, but are then sometimes wanting. (9. 46.)

When symptoms of irritation of the alimentary canal have subsisted a few hours, *convulsive movements often occur.* They commence on the *trunk*, afterwards extend over the whole body, are seldom violent, and generally consist of nothing else than *tremors and twitches.* *Cramps of the legs and arms*, a possible concomitant of every kind of diarrhœa, is particularly frequent and severe in that caused by Arsenic. The general system always sympathizes severely with the local derangement. The pulse commonly becomes very small, feeble and rapid soon after the vomiting sets in, and in no long time it is often imperceptible. This state is naturally attended with great coldness, clammy sweats and lividity of the hands and feet. Another symptom referrible to the circulation, which has been observed, though rarely, is *palpitation.* (9. 46.)

The countenance is commonly collapsed from an early period, and almost always expressive of great torture and extreme anxiety or despair. The eyes are red or sparkling; the conjunctiva often so injected as to seem inflamed, the tongue and mouth parched, and the velum and palate sometimes covered with little white *ulcers.* Delirium sometimes accompanies the advanced stage, and stupor also is not infrequent. Coma occasionally precedes death. Very often, however, the patient remains quite sensible to the last. Death in general comes on calmly, but is sometimes preceded by a paroxysm of convulsions. In some instances it takes place quite abruptly, as from a sudden deliquium, as in a case mentioned by Dr. Dimock of Edinburgh. The patient, a girl who had taken two ounces intentionally, rose from bed without help two hours and a half afterwards, went to a chair at the fireside, and had scarce sat down when she expired. (Two or three similar cases will be related in this article. (9. 46.)

Various *eruptions* have at times been observed, especially in those who survive several days, but they are more frequent in the class of cases to be described hereafter, in which life has been prolonged for a week or more. The eruptions have been variously described as resembling *petechiæ*, or *measles*, or *red miliaria*, or *small-pox.* In a case mentioned by Guilbert, a copious eruption of *miliary vesicles* appeared on the fifth day, and for fifteen days afterwards. They were attended with perspiration and abatement of the other symptoms, and followed by *desquamation of the cuticle.* Another external affection which may be mentioned is *swelling of the whole body.* (9. 46.)

In some cases of the kind now under consideration a short *remission*, or even a *total intermission* of all the distressing symptoms has

been witnessed, particularly when death has been retarded till towards the close of the second or third day. This *remission*, which is accompanied by dozing or stupor, generally occurs about the beginning of the second day. It is merely temporary. In these cases (such as are now referred to) death often occurs about twenty-four hours after the poison is swallowed, and generally before the close of the third day. But on the one hand life has been sometimes prolonged, without the supervention of the symptoms belonging to a different variety of cases for five or six days, nay, even for several weeks; and on the other hand, the symptoms of irritation of the alimentary canal are sometimes distinct, although death may take place in a much shorter period than twenty-four hours. (9. 46.)

Such is an account of the symptoms of poisoning by Arsenic in their most frequent form. It will of course be understood, that they are liable to a great variety as to violence, as well as their mode of combination in actual cases; and that they are by no means all present in every instance. (9. 46.)

According to Pereira, who follows Christison very closely, the symptoms produced by the ingestion of a large dose of Arsenious-acid, are not invariably alike, but put on three forms. (54.)

FORM 1st.—*Acute Poisoning, with Symptoms of Gastro-enteritis.*

In this form of Arsenical poisoning, *nausea* and *vomiting* come on soon after the poison has been swallowed, and are attended with *burning* pain in the *throat* and *stomach*, which soon extends over the whole abdomen. Pain and vomiting are, however, not invariably present. Frequently there is a sense of heat, dryness, tightness, and constriction of the throat, accompanied by incessant thirst, and occasionally with an almost hydrophobic difficulty of swallowing. The lower part of the alimentary canal soon becomes affected, indicated by the *burning* pain, which is increased on pressure, by the hard and tense condition of the abdomen, by the diarrhœa, (the stools occasionally being bloody,) by the *tenesmus*, and by the occasional *heat* and *excoriation* of the *anus*. (3. 54.)

When the lower part of the alimentary canal is powerfully irritated, the urino-genital apparatus becomes affected, and thus there may be *difficulty* in *passing* the *water*, with *burning* pain in the *genital* organs.

The urine is frequently *diminished* and *sometimes* *suppressed*. The constitutional symptoms are a *quick* *pulse*, which is at the same time *small*, *feeble*, and *irregular*. There are cold, clammy sweats; the action of the heart is irregular, giving rise to *palpitation*; the breathing is *short*, *laborious*, and *often* *painful*; the tongue is dry and furred, and the membrane lining the air-passages feels hot and oftentimes painful.

Although in this form of acute arsenical poisoning, the gastro-enteritis is the principal, and in some cases the only affection, yet there are generally observed some symptoms indicative of disorder of the cerebro-spinal system; sometimes in the form of tremblings or cramps in the limbs, or delirium, and even in the last stage, insensibility. Occasionally

also eruptions take place, which are frequently attended by itching of the skin. (3. 54.)

In this form of poisoning, death usually occurs in from twenty-four hours to three days after the administration of the Arsenic; but Dr. Christison, quoted by Pereira, says that Pyl has recorded a case where death occurred in three hours after swallowing the poison. (3. 54.)

CASE 1.—A young man took an unknown quantity of Arsenic on an empty stomach; in half an hour violent retching and contraction of the stomach, followed quickly by severe vomiting; he then acknowledged what he had done. Large quantities of milk were given, but the symptoms increased; six or eight hours after the patient's face was pale and very anxious, he answered in a very low voice, complained of the most intense pains in the abdomen, great oppression in the præcordial region; he had incessant vomitings, and felt as if his stomach and bowels were being torn out with pincers; there was great restlessness, headache, dizziness, *cramps in the calves* of the legs, small suppressed pulse, great thirst, and very frequent stools mixed with *slimy and fatty masses*. (4. 11.)

Treatment.—The *Liquor Ferri-oxydati Hydratici* was given at first in doses of two table-spoonsful, then one spoonful every half hour; at first he vomited it off, but soon retained it; at the end of twelve hours in all, he was in a profuse sweat, had a feeling of warmth in the abdomen, his pulse had risen, his face was red, and he had much thirst; he slept quietly at night, and was quite well the next morning, with the exception of weakness of the whole body, but especially of the limbs; *tenesmus* was relieved by injections of oil. (4. 11.)

CASE 2.—Arsenic taken in soup produced frequent vomiting of slime and bile; also of greenish-yellow bitter fluid; the pulse was very small and extraordinarily frequent; there was great restlessness, unquenchable thirst, dizziness, and cramps in the calves, with lividity of the face. The incessant vomiting, the diarrhœa, cramps in the legs, and livid skin caused the case to be mistaken for sporadic cholera. (4. 11.)

CASE 3.—A man put two ounces of Arsenic in his wife's dinner; she took but little, as it tasted badly, but in half an hour was attacked with violent burning in the throat, and severe pains in abdomen; the evening and night were passed in great agony, with violent vomitings and burning thirst; she was left until the third day without medical advice, and was then in the most distressing condition; she was exceedingly exhausted, had blue circles around her eyes, her tongue and mouth were dry and inflamed, she had burning thirst, was excessively fearful, had pains and tremblings in all her limbs, tearing pains in the stomach and bowels, frequent fruitless retching, violent vomitings and incessant diarrhœa, by which only mucous and greenish substances were evacuated. She died on the sixth day. (4. 11.)

Post-mortem.—Tongue coated with a dirty, yellow covering; the anus gaped open and a greenish stuff flowed from it; the blood was *black and fluid* in all parts of the body; the whole peritoneum was

reddened; the inner surface of the stomach was almost black, and as if swollen and thickened; the internal surface of duodenum and upper part of jejunum very dark red. Portions of the larynx and œsophagus were almost black. The stomach contained a yellowish-red fluid; the small bowels a moderate quantity of yellowish stuff, and an *unnatural and profuse secretion of yellowish intestinal mucus*; the cavity of the pleura at least eight ounces of *reddish water*, and there was a spot on the pleura three inches in diameter, covered with a gelatinous recent false membrane, into which vessels had already commenced to shoot, although it was so loosely attached to the pleura that it could easily be removed. (4. 11.)

CASE 4.—A man took Arsenic intentionally, had the usual pains and vomitings, but only ejected white mucus; his face was covered with sweat, his eyes were quite red and protruding, and he trembled violently. (4. 11.)

Post-mortem.—The whole inner surface of the stomach was inflamed; the blood in the large vessels was thick, but not coagulated, and resembled whortleberry-juice in color; the heart was filled with dark syrup-like blood. (4. 11.)

CASE 5.—A healthy woman, aged sixty, partook of some soup in which six grains of Arsenic had been put; she had the usual gastric symptoms and diarrhœa; she recovered, *but her hair fell out profusely*. (4. 11.)

CASE 6.—A man took only five or six spoonsful of the same; he vomited about forty times in four or five hours; took two quarts of sweet milk, and suffered for a week with violent burning pains in the stomach and bowels, with nausea and frequent vomiting; for a long time after he had much *acidity of the stomach*, and vomited easily after light meals; six months subsequently he was suddenly attacked without known cause with violent vomiting and diarrhœa; he complained frequently of *chills*, fever, thirst, *headache at irregular times, especially at night*, emaciation and debility, *pains in the joints*, trembling of the hands, and weakness of sight. (4. 11.)

CASE 7.—The wife of the above, aged forty-eight, strong and healthy, took only three table-spoonsful, and had violent vomitings and pains in stomach; for several days she remained weak and without appetite, suffered with indigestion and nausea, frequent vomitings, *restlessness*, fever, headache, debility, *frequent falling asleep and loss of feeling in the right leg and arm*; a cough which she had before, was increased. (4. 11.)

CASE 8.—A robust servant girl, aged twenty, took four spoonsful, and had the same gastric symptoms; she had *weakness of her feet*, and also troublesome pains in her temples for five weeks. (4. 11.)

CASE 9.—A healthy girl, aged seventeen, took two spoonsful, and was so severely affected that she lost her consciousness; she recovered slowly, and suffered with loss of appetite and *weakness of her legs* for eight days. (4. 11.)

CASE 10.—A healthy man, aged thirty-eight, took eight spoonsful,

but suspecting something, drank eight pints of warm water; he vomited freely and seemed to recover quickly, but two weeks afterwards he was attacked with general *debility of the whole body, especially of the legs*, in which he felt a *peculiar heaviness and lassitude*, particularly from the knees down to the ankles; also unpleasant sensations in the stomach, frequent griping inclination to diarrhœa, loss of appetite, heaviness and aching in the head, roaring in the left ear, dizziness, pain in the temples, and a peculiar restlessness, relaxation and absent-mindedness. (4. 11.)

CASE 11.—A healthy coachman, aged twenty-two, took three spoonsful; he had the usual gastric symptoms, drank much warm water and sweet milk, and recovered promptly, with the exception of weakness of the legs, *oppression of the chest, and hoarseness*. (4. 11.)

CASE 12.—A woman, aged twenty-eight, took a drachm of Arsenic; had the usual gastric symptoms, became unconscious, and gradually recovered: she had profuse sweats on the fourth day, and on the ninth, a dysenteric diarrhœa occurred. (4. 11.)

CASE 13.—A man took from four to six grains of Arsenic on a full stomach; slept all night, but waked in the morning with the usual gastric symptoms; twelve hours after his face was pale, his head ached violently, his eyes were injected; he vomited mucus and blood; he took half-drachm doses of Oxide of Iron; after a few doses, the retchings, vomitings and pains in stomach ceased; he took an ounce of Iron in all, and recovered. (4. 11.)

CASE 14.—A lad, aged seventeen, ate a meat-pie, which was intended for rats, and contained half an ounce of Arsenic. He was soon in a state of great anxiety and restlessness, with pain in his throat and stomach; vomited often; pulse 112 and hard; skin warm, tongue white and dry, with great thirst; after drinking freely, he vomited some *yellow mucus* streaked with blood; these symptoms were quickly followed by general coldness, *cramps of the legs*, coldness of the limbs, and collapse. In six hours he was sleepy, very sensitive to cold, and vomited a *yellowish* fluid mixed with mucus from time to time; no pain or sensitiveness of epigastrium, but the *cramps* extended up the limbs; pulse fell to 70, and was small; it soon became weak and irregular, varying from 70 to 140; the *cramps*, which were not painful, extended up over the abdomen; he was quiet and sleepy, and died in fourteen and a half hours. (4. 11.)

Post-mortem.—Muscles firm and rigid; some congestion, but no fluid in cavity of pleura; heart firmly contracted, almost cartilaginously hard and very red, like all the other muscles; left ventricle empty; right, filled with dark fluid blood; some yellowish-green bile in gall-bladder; much *yellowish* viscid fluid in stomach; vascularity of stomach and bowels; rectum much distended; bladder contracted, but pale. (4. 11.)

CASE 15.—In another badly described case there was a *small perforation* in the anterior portion of stomach.

CASE 16.—A family of four persons was seized, after partaking to-

gether of some broth, with acute pain, vomiting, and other symptoms of poisoning. They all recovered, though the dose was proved to have been very considerable. The causes assigned for the favorable termination were, that the Arsenic was administered in fragments, or coarse powder, and that it was enveloped by the greasy matter of the broth. (13. 46.)

CASE 17.—A lady in Paris took a considerable dose of Arsenic in the form of powder sprinkled on bread and butter. Three or four hours after this she took a cup of coffee, which immediately induced vomiting, and it continued to recur at intervals. Between six and seven o'clock in the evening of the same day, she was found suffering with all the symptoms of arsenical poisoning, and the Hydrated Oxide of Magnesia was prescribed; it was followed by liquid evacuations, and the patient recovered. (13. 46.)

FORM 2d.—*Acute Poisoning, with Collapse or Narcotism, without any remarkable symptoms of Gastro-enteritis.*

In some cases of poisoning, both in man and animals, the symptoms are those indicating disorder of the cerebro-spinal and vascular systems; abdominal pain, vomiting and purging being either altogether absent or very slight. The symptoms are usually faintness, or perhaps actual syncope, frequently convulsions or paralysis, and sometimes insensibility or delirium. This form of arsenical poisoning is very rare. In most of the recorded cases, the quantity of Arsenious-acid taken was very large; for example, half an ounce or even more. (3. 54.)

Dr. Pereira states that he has seen one case of this form of poisoning. The individual (a gentleman about twenty years of age,) coarsely pounded a lump of Arsenious-acid and swallowed it. At a rough calculation it was supposed that he took about six or eight drachms of the Arsenic. The symptoms were pain, vomiting, great weakness, with extreme depression of the vascular system, faintness, collapse, and death in about four hours. (3. 54.)

His intellect was clear until a very short time before death, when he sank into a doze. There were neither convulsions nor paralysis. Every attempt was made to remove the poison from the stomach; copious vomiting existed; large draughts of water were administered, and the stomach-pump applied. Notwithstanding these circumstances, more than four drachms of solid Arsenious-acid in the form of lumps, was found in the stomach after death. Their weight had apparently prevented their removal during life. (3. 54.)

This *second* variety of poisoning with Arsenic includes a few cases in which the signs of inflammation are *far from violent*, or even altogether *wanting*, and in which death ensues in from four to six hours, or a little more, at a period too early for inflammation to be always properly developed. The symptoms are then generally obscure, and are referrible chiefly to the mode of action, which is probably the cause of death in most cases—a *powerful debilitating influence* on the circulation or on the nervous system. (9. 46.)

These symptoms occasionally amount to absolute *narcotism*, as in some of the animals on which Sir Benjamin Brodie experimented. Thus, when he injected a solution of the Oxide of Arsenic into the stomach of a dog, the pulse was rendered *slow and intermitting*, the animal became *palsied* in the hind legs, lethargic, and in no long time *insensible, with dilated pupils*; and soon afterwards it was seized with *convulsions*, amidst which it died, fifty minutes after the administration of the poison. In man the symptoms very seldom resemble so closely those of the narcotic poisons. In Mr. Stallard's case, however, the symptoms of irritation which appeared at first, speedily gave way to *complete insensibility* for two hours before death. A similar instance has been related in Hencke's Journal. A young man who got an arsenical solution from an old woman to cure ague, was attacked after taking it with vomiting and loud cries, and afterwards with incoherent talking, then fell into a *deep sleep*, and finally perished in *convulsions* in five hours. (9. 46.)

In some cases of the kind now under consideration, one or two attacks of vomiting occur at the usual interval after the taking of the poison; but it seldom continues. The most uniform and remarkable affection is *extreme faintness*, amounting at times to *deliquium*. Occasionally there is some *stupor*, or rather oppression, and often *slight convulsions*. Pain in the stomach is generally present, but it is slight and seldom accompanied with other signs of internal inflammation. Death commonly takes place in a few hours. Yet even when it is retarded till the beginning of the second day, *the faintness and stupor* are sometimes more striking features in the case than the symptoms of inflammation in the stomach. (9. 46.)

This variety of poisoning has hitherto only been observed under the three following circumstances: when the dose of poison was large, when it was in little masses, or when it was in a state of solution. The mode in which the first and last cases operate is evident; they facilitate the absorption of a large quantity of Arsenic in a short space of time, so that its remote action begins before local action is fully developed. But it is not easy to see how any such effect can flow from the Arsenic being in little masses; it is also to be observed that none of the circumstances here mentioned is invariable in its operation. (9. 46.)

On the whole, the present variety of poisoning is *rather uncommon*, and indeed, although the attention of the profession was pointedly called to it, it does not seem to be so generally known as it ought to be. (9. 46.)

CASES.—A druggist swallowed an ounce of powdered Arsenic at once and died in eight hours, after two or three fits of vomiting, with slight pain and heat in the stomach. (9. 46.)

A young woman died in a few hours after suffering from trivial diarrhœa, pain in the stomach, and strangury; her death was immediately preceded by slight convulsions and fits of suffocation; on dissec-

tion, the stomach and intestines were found quite healthy. Half an ounce of Arsenic was found in the stomach. (9. 46.)

A girl fourteen years of age, took about ninety grains and died in five hours, having vomited once or twice; she complained of some little pain in the belly, and was affected towards the close with great faintness and weakness. The stomach and intestines were healthy. (9. 46.)

Another case was that of a man so addicted to drinking that his daily allowance was a pint of brandy. When first seen, there was so much tranquillity that doubts were entertained whether Arsenic had been really swallowed; but at length he was discovered actually chewing it. This state continued for nearly five hours, when some vomiting ensued; coldness of the extremities and spasmodic flexion of the legs soon followed, and in a few minutes more he expired. (9. 46.)

An individual having swallowed three drachms at eight o'clock in the morning, went about bidding adieu to his friends, and telling them what he had done. He was then prevailed on to take emetics and diluents, which caused free and easy vomiting. He suffered very little till one, when he became affected with constricting pain and burning in the stomach, feeble pulse, cold sweats, and cadaverous expression, under which symptoms he died four hours later. Orfila designates this the most extraordinary case of poisoning with Arsenic which has come under his notice. (9. 46.)

In another case the symptoms were at first some vomiting, afterwards little else but faintness, sickness, a sullen expression, and a general appearance which led those around him to believe him intoxicated. Death took place in nine hours. (9. 46.)

A stout, middle-aged man, swallowed a large quantity of Arsenic in fragments, and died in a few hours; he experienced nothing but feebleness and great tendency to fainting. The stomach and intestines were not in the slightest degree affected during life, and no morbid appearance could be discovered in them after death. (9. 46.)

Another died with narcotic symptoms within only two hours after taking nearly a quarter of a pound of Arsenic. (9. 46.)

Another case proved fatal in four hours, when the symptoms were vomiting under the use of emetics, great exhaustion, feeble hurried pulse, cold sweating, drowsiness, and finally stupor. The quantity of Arsenic taken was about an ounce. (9. 46.)

A young woman was caught in the act of swallowing little fragments of Arsenic, and it afterwards appeared that she had been employed most of the day in literally cracking and chewing lumps of it. When the physician first saw her, the countenance expressed chagrin and melancholy, but not suffering. After being forced to drink, she vomited a good deal, but without uneasiness. Two hours afterwards her countenance was anxious, but she did not make any complaint, and very soon resumed her tranquillity. Five hours after the last portions of the poison were taken, she became drowsy, then remained perfectly quiet for four hours more, and at length on trying to sit up in

bed, complained of slight pain in the stomach, and expired without agony. (9. 46.)

The cases which have here been given, will be sufficient to correct the impression that Arsenic when it proves fatal always produces violent and well-marked symptoms. (9. 46.)

CASE 1.—A girl, aged eighteen, took an ounce of Arsenic in powder; in two and a half hours she was vomiting violently much mucus and small pieces of Arsenic. The Hydrated Per-oxide of Iron was given, and she lay the whole day quietly in bed, praying with folded hands; her face did not express pain, and she distinctly stated, whenever asked, that her back ached her, but she had no other pain; there were no other signs of poisoning; she would not take the antidote any more, and she died in twelve hours; the only symptoms were repeated vomitings, and several stools without pain: putrefaction commenced in twenty-four hours, and had made rapid advances the next day. (4. 11.)

CASE 2.—In this case the Arsenious-acid was swallowed by mistake for flour, at 6 o'clock in the morning. He did not discover his mistake for half an hour, and then, though feeling no signs of illness, he *walked slowly two miles* to the surgeon's. He arrived there shortly after 8 o'clock, and very coolly said he wanted an emetic, but did not say, until asked, what he wanted it for. He complained of no sickness, faintness, burning or pricking sensation in the throat, nor of any symptom of poisoning—especially poison which had been swallowed two hours previously. He received an emetic of Sulphate of Zinc, which acted in a few minutes, and brought up some white powder tinged with bile. I then gave him large draughts of milk and lime-water, which were quickly ejected. After a short interval the stomach became quiet, and he expressed himself as quite well, and said he would return to his work; but he consented, on my advice, to remain at home for a few hours, and in the meantime to drink plentifully of lime-water. I desired him to send to me on finding himself at all ill, or if sickness should come on. (13. 46.)

I felt very skeptical as to his having taken Arsenic, and unfortunately I was unable to decide the point, for during my absence for a moment, my surgery-boy had thrown away the contents of the basin which deceased had vomited. Hearing nothing of deceased for three hours after this time, I felt satisfied that Arsenic had not been taken, and believed the man had gone home. At 12 o'clock I was sent for, as diarrhœa had suddenly come on. He had vomited two or three times *yellowish-colored* fluid. On my arrival I found the patient sitting by the fire in a *drowsy* state, but easily roused. Countenance sunken and livid; pulse rapid, and extremely feeble; surface of the body cold, and watery stools of a greenish hue passing involuntarily. He answered questions rationally, and complained of no pain, no tenderness of the abdomen, no tenesmus, or any of the usual irritative symptoms of poisoning by Arsenic. He was ordered instantly to a warm bed, and to have hot water to his feet, &c., and a little brandy and water. He seemed to rally for a short time, and desired to get

out of bed. He was allowed to do so, contrary to orders, and then complaining of dimness of sight, lay down on the bed, and in a few minutes expired. A post-mortem was not held. (13. 46.)

The remarkable features of this case are, the length of time before any symptom of poisoning occurred, and the total absence of the usual symptoms of poisoning by Arsenic. (13. 46.)

CASE 3.—A case analogous to this has been reported, where a young woman swallowed a considerable number of small fragments of Arsenious-acid. As she was seen swallowing the poison, a physician was sent for immediately—he forced her to drink, which caused vomiting without much uneasiness. In two hours afterwards her countenance expressed much anxiety, but she was tranquil. She gradually became drowsy, then remained calm for four or five hours, and finally on trying to sit up, complained of pain in her stomach, and expired without a groan. (13. 46.)

CASE 4.—On Sunday, at 5 o'clock in the afternoon, a woman requested me to visit her niece, who had taken a tea-spoonful of white Arsenic. The patient I found to be a heavy, stupid-looking girl, sitting in her chair more asleep than awake; on rousing her she reeled about the room in such a manner that I suspected poisoning by some narcotic. However, she acknowledged having swallowed "*white Mercury*," and a paper was brought to me which I immediately recognized by the aid of a pocket-lens to be Arsenious-acid. She vomited once after dinner, but there were no further symptoms until half an hour before she died, at noon the following day. She had no pain, no sickness, no acrid eructations, no burning taste in the mouth; her face was very pale, and she was faint and giddy. The Sulphate of Zinc, with mucilaginous drinks, was given her, and soon produced copious vomiting, which was kept up for half an hour. The Hydrated Peroxide of Iron was then administered in large doses. At 9 o'clock at night she had experienced *no pain, no unpleasant symptoms whatsoever*. She was disposed to sleep quietly. At 10 o'clock the next morning, her aunt came to say that she was quite well, and wanted permission "*to go a-gleaning*," but at half-past 11 o'clock, while in a more than ordinarily cheerful mood, and engaged in preparing dinner, she suddenly complained of an excruciating pain in the body with great prostration of strength. She went to her bedroom to lie down, and at 12 was found dead. (13. 46.)

It is supposed that as the lower classes in Lincolnshire are excessively addicted to the use of Opium, this might have been the case here; and that the Opium may have suppressed and prevented the Arsenic-pains from making themselves felt. This, however, is not necessary, as it is by no means the first, or only case on record, where *no pain whatever* has been experienced. (46.)

Pathology.—Stomach contained half a pint of a thin, dirty, green fluid; mucous coat much corrugated, having a fungous appearance, very soft and so fragile that a touch of the finger tore it away. Three or four large reddish-brown patches were observed, extending into the

intestines considerably beyond the duodenum. The peritoneal coats of the stomach and bowels were not inflamed. The lungs and the heart were healthy; head not inspected. Arsenic was contained in the stomach-fluids. (13. 46.)

CASE 5.—Harriet T., aged nineteen, a robust and healthy girl, took on Tuesday night, Sept. 1st, about two ounces of fly-water, containing two and a half grains of Arsenic. It rendered her restless during the night, producing watchfulness and slight pain in the stomach. Next morning she became sick and very thirsty, and the tenderness and pain in the stomach had increased. In the course of the day the sickness became worse, she was repeatedly purged, her countenance looked pinched, and the extremities became cold. On Wednesday night she rallied and became more comfortable and cheerful, but was still thirsty. On Thursday morning she was worse, cold and drowsy, and she was sent to the London Hospital; her countenance was then pale and anxious, extremities cold and bedewed with a cold clammy sweat; pulse hardly perceptible, and she lay in a state of incipient coma. She then sank and died in about thirty-six hours after the administration of the poison. The body was examined twenty-one hours after death, and from the appearances present Dr. Letheby was led to conclude that death resulted purely from coma, as neither the symptoms during life, nor the state of the stomach after death would allow him to attribute it to the effects of gastro-enteritis. (13. 46.)

Pathology.—The brain was much congested and the several ventricles filled with half-coagulated blood. Lungs natural; the heart flabby and distended with dark jelly-like blood; hæmorrhagic spots were seen on the endocardial membrane, especially where it covers the auriculo-ventricular valves. The abdominal and pelvic viscera were congested;—the stomach was pale and empty, and along the pylorus it had assumed a gamboge tint: Arsenic was found in its tissues. (13. 46.)

This is a valuable addition to the comparatively small class of cases in which death is due solely to *coma*. Another case has recently occurred at the King's College Hospital, in which the poison was also taken in fly-water, when after the complete evacuation of the stomach and temporary relief of all the symptoms, the child was seized with fatal coma. The smallness of the dose is also unprecedented. (13. 46.)

CASE 6.—An interesting case of poisoning by Arsenic, in which none of the usual symptoms were observed, is reported by Mr. Houghton. He was called to see Mrs. B., whom he found in a state of considerable mental excitement, but without any symptoms of cerebral affection. She told him very collectedly, that about three quarters of an hour previously she had taken half an ounce of Arsenic, which she had that morning procured from a druggist. She was free from the ordinary symptoms of irritant poisoning. She had no thirst, pain, heat, or constriction of the throat or fauces, epigastric tenderness, vomiting, tormina, abdominal pain, or discharge from the bowels. The

stomach-pump, albumen, Sulphate of Zinc, and the hydrated peroxide of Iron were used. She was then put to bed, where she became composed, almost free from pain, but had occasional gentle fits of vomiting of a bilious character, this being the only symptom. Her pulse was rather feeble, and she soon seemed disposed to doze, in which state she continued for an hour and a half, when her bowels were moved, accompanied by some tenesmus. In about an hour from this time she was found in a state of collapse, which was met by external stimulants. From this state of depression she never properly rallied, but remained quietly dozing from time to time, and died perfectly calm and collected, thirteen and a half hours from the time of taking the poison. (13. 46.)

Throughout her illness she presented no gastric symptom, except occasional mild vomiting; but whatever the stomach received was soon rejected; there were no tormina, no tenesmus or strangury; no cramp, and no cerebral or spinal symptom to the last. Arsenic was found in large quantities in the fluid discharged by the stomach-pump. (13. 46.)

Pathology.—At the pyloric end of the stomach, on the posterior surface of the organ, there was a bright red patch, nearly the size of the palm of the hand; and on the posterior part of it there were several streaks, about half an inch wide of a black color, and running from above downwards, slanting from the cardiac to the pyloric end of the stomach. The intervening mucous membrane had a natural appearance. On washing the black deposit away, which was effected with difficulty, the mucous membrane beneath was found to be considerably inflamed. This black deposit was left where the membrane was inflamed, excepting on the red patch near the pylorus, and nowhere else. It was most copious also where the inflammation was most severe. There was no destruction of the mucous membrane. With the exception of the red patch at the pyloric extremity of the stomach, every part of the mucous membrane which had been acted on by the Arsenic, was thickly coated with iron, which it required some trouble to wash off with a sponge, as if the antidote had been attracted and firmly held by the poison, which indeed had become so completely combined with it as to be incapable of detection upon repeated careful experiments. In testing the contents and coats of the stomach for the poison, the resulting liquid was filtered through charcoal, by which probably a part of the Arsenic was arrested. (13. 46.)

CASE 7.—A lad, aged seventeen, took three drachms of Arsenic on an empty stomach, not having eaten for seventeen hours; thirteen hours after he was sleepy, pulse 90, soft and rather weak, tongue coated, slight nausea, but little tenderness of abdomen; he only vomited after being obliged to drink freely; his pulse rose to 110, and hard; he drank and vomited five gallons of fluid; he was restless and became weaker, but had little pain; in fifty-five hours his stools became dark, bilious, and mixed with mucus, with constant urging; he became weaker, extremities cold, cold sweats, complained of burn-

ing heat of the whole body, but his skin felt cold, great restlessness, excessive thirst; he soon died. (4. 11.)

Post mortem: Unusual rigidity of the body; livid color behind ears, on neck, scrotum, penis and nails; *great vascularity of the pleura*, especially the diaphragmatic portion, with but little fluid in its cavity; pericardium contained two ounces of reddish brown fluid; spasmodic contraction of heart; blood coagulated but slightly, and black; omentum very vascular; great vascularity of stomach and bowels; pylorus very much thickened and vascular; liver paler than usual; gall-bladder filled with saffron-colored bile; much thick yellow fluid in bowels;—lower part of colon and rectum much contracted, not larger than a thumb, apparently thickened, and the ligamentous bands enormously contracted; kidneys congested; a small quantity of purulent fluid in the pelvis; bladder contracted and hard, not larger than a small pear, and its mucous coat very vascular. (4. 11.)

CASE 8.—The Duke of Praslin, as is well known, after the murder of his wife, took Arsenic, with the view of committing suicide. The amount taken could not be arrived at, but it was probably large; yet though the symptoms were severe, and the internal lesions very extensive, he survived five days and eighteen hours. The first symptoms appeared on the evening of the eighteenth; there was vomiting, accompanied by an extremely feeble pulse, and great debility; the vomiting ceased after a glass of Bordeaux and some ice. During the night and next day the vomiting returned; on being placed in a bath he fainted: the fainting recurred on leaving it; and soon after he had an involuntary evacuation. At 3 o'clock in the afternoon of the 20th, being in bed, he stated in answer to a question that he was better. He spoke distinctly, his mind was clear, he did not complain of any pain in the abdomen on pressure, he breathed freely, the tongue was clean, but the pulse was extremely small and irregular, and the extremities icy cold. These symptoms led M. Andral, who had been called in to suspect the possibility of poisoning, and the evacuations were preserved. At 11 o'clock in the evening of the 20th he was somewhat stronger; evacuations had ceased, pulse stronger and more regular, but too frequent; hands still cold. On the 21st he was removed from his residence to the prison of the Luxembourg. He suffered merely from coldness of the extremities, and thirst. An hour after his arrival he was found with a calm appearance, a little more color than natural, a somewhat vacant look, the temperature of the body, with the exception of the hands, restored; the sufferings relieved, pulse tolerably full, from eighty to eighty-five in a minute, tongue clean, thirst excessive, stomach free from pain, no vomiting or nausea. In the evening the pulse was small, frequent and like a thread, and the extremities cold; there was a great sensation of tightness in the throat, and of great oppression; the abdomen was tympanitic and slightly painful; no evacuations of any kind since the removal to the Luxembourg. On the 22d all the symptoms were more intense; there was extreme spasmodic constriction of the throat, very

painful deglutition, and ardent thirst; the tongue and mucous membrane of the mouth and pharynx of a deep red; a sensation of burning from the mouth to the anus; the abdomen inflated and tender to the touch; a high state of fever, a frequent and irregular pulse, now strong, now weak; extreme oppression, no nausea, no vomiting; bowels twice relieved by injections; urine passed in small quantities, though diuretics had been employed. He passed a restless and sleepless night, and was evidently growing weaker. On the 23d the symptoms were aggravated, the features had undergone a great change; the complexion had assumed a reddish-brown cast; the intellect remained clear; there was constant thirst, extreme constriction of the throat, very painful deglutition; the tongue red and dry, the abdomen inflated and painful, the respiration much oppressed; the pulse small and frequent, the extremities very cold; no evacuation of the bowels, and no urine passed. At seven o'clock on the morning of the 24th, his sight had become dim, the respiration very difficult, the pulse very weak and frequent, but the mind still intact. At one o'clock the respiration was more embarrassed, the extremities icy-cold, the pulse very frequent and scarcely perceptible. He gradually sank and died at thirty-five minutes after four o'clock, having preserved his senses to the last. (13. 46.)

PATHOLOGY.—The post-mortem examination discovered nothing worthy of remark in any other part of the body, except the alimentary canal, unless the effusion of blood in spots under the pleura, and under the lining membrane of the left ventricle of the heart be considered as due to the action of the poison. In the stomach from the cardia to the pylorus, there were seven large eschars, from three-fourths of an inch to an inch, and a half in diameter, scattered over the length of the great curvature. These eschars were black, and completely circumscribed by a hard and thickened border of a faint yellow color. Round these eschars, for a short distance, the mucous membrane was somewhat softened, and of a deep red color. The eschars did not extend through the whole thickness of the walls of the stomach, and there was neither ulceration nor perforation. The rest of the mucous membrane was perfectly healthy; the duodenum and the lower portion of the ileum were of a uniform dull-red color, but free from eschars and ulcers. The rest of the intestines, large and small, were perfectly healthy. (13. 46.)

CASE 9.—A man of dissipated habits, three hours after an unusually full supper, took a large dose of powdered Arsenic, followed by copious draughts of water. He passed the night with great agony in the chest and bowels, but had no nausea, vomiting, or diarrhœa. At 11 A.M., the next day, M. Chammartin was sent for, and found the man in a state of great collapse, with his face pale, and his features haggard and pinched; he was agitated and spoke with a feeble voice; his respiration was difficult, and he complained of a tearing sensation along the gullet, and at the epigastrium, and of thirst and dryness of the fauces. His tongue was moist, but red at the edges and point, his de-

glutition was easy, and there was no diarrhœa, though he suffered from colic and cramps in all his limbs. The hydrated oxide of Magnesia was then given, warmth was applied to the surface, and he was afterwards bled. He was then removed to the Hotel Dieu where all his symptoms improved. He finally recovered. The quantity of Magnesia given was about seventeen ounces; and while in the Hotel Dieu some hydrated sesquioxide of Iron was also given. (13. 46.)

CASE 10.—A respectable young man fell in love with a girl of an abandoned character, quarrelled with his relations, and while under the conjoined excitement of this and liquor, persuaded the girl to join him in taking Arsenic. They purchased an ounce, which was entirely consumed by them after a hearty supper; it was mixed with flour in the form of a cake. This was in the evening. Soon after 11 o'clock they were found lying on the bed, apparently insensible. The man on being roused began to be sick, and confessed that he had taken Arsenic. A surgeon was summoned, and he was immediately removed to his home. The girl was not seen by a medical man until 1 A.M. She had then vomited two or three times. The vomited matter appeared to consist of lumps of fish, cake, &c. in a semi-digested state. She complained of a severe burning pain in the stomach, throat and bowels. She appeared wild and excited, and from her manners had evidently been drinking freely. An emetic of Sulphate of Zinc was given, the fauces were tickled, and a quantity of albumen and water administered, which soon produced vomiting. The stomach-pump was used, and the common sesqui-oxide of Iron. Both patients convalesced. (13. 46.)

This is probably the largest amount on record, from which a patient has recovered. The recovery in this case is probably due to the hearty supper, the quantity of mucilaginous drinks, and to its having been mixed with flour, all of which would tend to envelop and entangle the particles of Arsenic and prevent their coming into injurious contact with the walls of the stomach. (13. 46.)

It is a notable fact that in the above cases the two most constant symptoms of arsenical poisoning were absent, viz., vomiting and diarrhœa. (46.)

3D CLASS.—The *third* variety of poisoning places in a clear point of view its occasional action on the nervous system. This occurs chiefly in persons, who, from having taken but a small quantity, or from having vomited soon after, are eventually rescued from destruction; but it has also been met with in some cases, in which death has ensued after a protracted illness. (9. 46.)

In such cases the progress of the poisoning may be divided into two stages. The first train of symptoms is exactly that of the first or inflammatory variety, and is commonly developed in a very perfect and violent form. In the second stage the symptoms are referrible to nervous irritation. (9. 46.)

These generally come on when the former begin to recede, yet

they sometimes make their appearance earlier, when the signs of inflammation in the alimentary canal continue violent; and more rarely both classes of symptoms begin about the same period. The nervous (?) affection differs in different individuals; the most formidable is *coma*: the slightest, a *peculiar imperfect palsy of the arms or legs*, resembling that occasioned by the action of lead: and between these extremes have been noticed *epileptic fits*, or tetanus, or an affection resembling *hysteria* or *mania*. (9. 46.)

CASE 1.—*Epilepsy*. A girl swallowed a drachm of Arsenic, and was in consequence attacked violently with the usual symptoms of irritation in the whole alimentary canal. After being ill about twenty-four hours she experienced several distinct *remissions* and had some repose, attended with fainting. In twelve hours she began to improve rapidly; the pain subsided, her strength and spirits returned, and the stomach became capable of retaining liquids. So far the patient labored under the common effects of Arsenic. But a new train of symptoms then gradually approached. Towards the close of the second day she was harrassed with frightful dreams, starting from sleep, and tendency to faint; next morning with coldness along the spine, giddiness and intolerance of light; and on the fourth day with aching of the extremities and tingling of the whole skin. These symptoms continued till the close of the sixth day, when she was suddenly seized with *convulsions of the left side*, foaming at the mouth, and total insensibility. The *convulsions* lasted two hours; the insensibility throughout the night. Next evening she had another and a similar fit. A third but slighter fit occurred on the morning of the tenth; another, next day at noon; and they continued to return occasionally till the 19th day. For some time longer she was affected with tightness across the chest and stomach complaints, but she was eventually restored to perfect health. (9. 46.)

CASE 2.—Five individuals partook of a dish poisoned with Arsenic, and they were all violently seized with the usual inflammatory symptoms. But, farther, one had an *epileptic fit* on the first day, which recurred on the second; and he had besides frequent twitches of the muscles of the trunk, a feeling of numbness in one side, and heat and tingling of the feet and hands. Another had tremors of the right arm and legs on the first day, and *several epileptic fits* in the course of the night. During the next fifteen days he had a *paroxysm every evening about the same hour*; which returned after an *intermission* of eight days, and frequently for several months afterwards. (9. 46.)

Symptoms of Acute Poisoning, with Gastro-enteritis, followed by an Affection of the Cerebro-spinal System.

In this form of poisoning we have at first the usual gastro-enteritic symptoms, which have been already described under the first form of poisoning. When from the smallness of the dose, or from other circumstances the patient recovers from the gastro-enteritis, symptoms of a cerebro-spinal affection sometimes make their appearance. The

kind of disorder, however, varies considerably in different individuals. The most formidable, says Dr. Christison, is coma; the slightest a peculiar imperfect palsy of the arms or legs, resembling what is occasioned by the poison of lead; and between these extremes have been observed epileptic fits or tetanus, or an affection resembling hysteria or madness. (3. 54.)

CASE 1.—Two boys, aged thirteen, and ten, a girl, aged fourteen, and an older person, partook of soup in which flour, prepared to poison rats, had been used by mistake. In a short time they all had violent pains in the bowels, and a painful sense of contraction in the stomach; they took milk freely, but without effect upon the pains, which increased to such an extent that the death of the patients was soon expected; five hours after, the *Ferri-oxidat.-hydrat.* was given in doses of from a half, to a whole tablespoonful every half hour; on the following day the children were quite well, but the older person still suffered with *violent trembling of the limbs*, and with pains in the head and stomach. Before two of the children took the antidote, they had had the most violent *spasms*, and lay exhausted, stiff and with their bodies bent backwards; their hands and faces were cold and covered with cold sweat. The other two were almost exhausted by constant retching and vomiting, and the most intense abdominal pains. (4. 11.)

After taking the antidote the gastric pains subsided slowly, but the vomiting ceased immediately, was followed by frequent thin stools, after which the three children fell into a quiet sleep. (4. 11.)

CASE 2.—Three servant-girls took Arsenic by mistake. They had the usual gastric symptoms, vomited blood, and had discharge of blood from anus; had much fever, followed by profuse sweats, pains in the teeth; and their chests and necks were covered with purple spots; after a lull of the symptoms they all had returns of vomiting, purging, excessive pains in the stomach, inflammation and swelling about the root of the tongue; two of them could not speak or swallow, and in twenty-four hours were seized with trismus and *convulsions of the whole body*; in forty hours one of them was in an *apoplectic* state, breathing with difficulty, with *general convulsions*, jaws locked, face pale and repulsive, pulse ninety, and weak; when aroused she had violent headache, with burning and pain in the throat; both the others became speechless and could not swallow; with *convulsive cramps of the body*, *locked jaws*, frequent *spasmodic* smiling, bloating of the face; pulse 106, and strong. The next day two of them were attacked almost simultaneously with headache, followed by *violent delirium* and unconsciousness, which were removed by cold affusions. (4. 11.)

CASE 3.—A girl, aged nineteen, took Arsenic in the morning at breakfast; remained comparatively well all day; had a *slight convulsion* in the evening, then vomited food, froth and a little blood; her face was red in patches, and covered with sweat; her eyes were swollen and the edges of lids very red; she had frightful pains in the stomach; her pulse was small, irregular and very frequent; epigas-

trium and bowels exceedingly sensitive and painful; after drinking freely she vomited very often; gradually became cold and collapsed, and died in eighteen hours. (4. 11.)

CASE 4.—A girl, aged twenty-two, was poisoned by her seducer; in twenty-four hours she lay unconscious, with large red spots over her whole body, and distended abdomen; the vomiting ceased; she recovered gradually and was delivered at full time. (4. 11.)

CASE 5.—A boy, aged three years, took $\frac{3}{4}$ grains of Arsenic; had the usual gastric symptoms, with scanty urine, high fever, quick pulse, white tongue, &c. He took Carbonate of Iron, and gradually recovered by the fourth day, with the exception of diarrhœa, with discharge of greenish, coagulated and bloody mucus. (4. 11.)

CASE 6.—A man, aged thirty-five, took half an ounce of Arsenic, but vomited more than half of it quickly. His pulse was quick, irregular, weak and spasmodic, his breathing difficult and look wild; his eyes projected from his head, and were bathed in tears, which excoeriated his cheeks; he had twitchings in the muscles of his face, and his tongue was dry; he had burning pains in the bowels, excessive thirst; abdomen was tense and tender; he had involuntary discharges of much acrid burning water from the bowels; offensive sweat over the whole body; his urine was suppressed, and his mind wandered from time to time. (4. 11.)

Death, seemed unavoidable, but on the sixth day a *profuse miliary eruption* broke out all over his body, with much relief; the eruption repeated itself several times in fourteen days, and terminated, finally, in *branny scales*; *ulcers* broke out on both heels and discharged an ichorous matter. He remained weak, had *general tremblings for a long time*, and *frequent attacks of inflammation of the eyes*. (4. 11.)

CASE 7.—A melancholic lad, aged eighteen, took a large quantity of Arsenic, and was soon attacked with great anxiety and a cold sweat; these disappeared in a quarter of an hour, and he remained well all day; in the evening a similar attack occurred and disappeared as quickly; during the night he was seized with severe colic pains, followed by vomiting and diarrhœa; he had violent pains about the navel, his face was pale, sunken and covered with a cold sweat; pulse contracted, frequent and irregular. *Convulsions* and other nervous symptoms ensued, he gradually recovered, but for more than a year he suffered with *spasms*, which seemed to commence in the abdomen; with attacks of idiocy and melancholy, and various other nervous affections. (4. 11.)

CASE 8.—About two drachms of Arsenic was put by mistake in wine; five men drank of it from time to time; they spat much, had heaviness in the head, stupefaction, nausea and violent vomiting; *one had paralysis of the legs*; another lay with loss of sensation and consciousness; the vomiting ceased, but hiccough set in, their pulses and respirations were scarcely perceptible, their faces swollen, eyes dull, lips convulsively distorted as if from risus sardonicus, jaws closed, hypochondria tense, and shaken by *convulsions*.

These symptoms were followed by fainting fits, *delirium*, *comatose stupefaction*, burning heat in the bowels, intense thirst, full strong pulse, hot skin, red and inflamed face, anxiety, &c. Then very troublesome *itching* occurred, followed by an *eruption of very small itch-like pustules*, which desquamated. (4. 11.)

CASE 9.—H. P. P., physician and surgeon, aged thirty-five, temperate and of good constitution. On the 24th of July, at a quarter to five o'clock P.M., sent for a small quantity of Bi.-tart.-potassa, which he took in ice-water, with sugar and ʒvj of Tr. Gent. Comp. In about twenty minutes he was taken very ill, and continued to get worse, for an hour and a half. He was in great distress with ineffectual efforts to vomit and purge until a quarter past six o'clock, when he began to vomit every five or ten minutes, and purged fifteen times in twenty-one minutes. In a short time he began to vomit and purge blood, which continued until three o'clock A.M., Sunday morning, when this ceased. Very excruciating cramps now commenced, and he was attacked with great thirst for the first time. Being left alone by his own request, and having no water, his sufferings were almost insupportable. At five o'clock he got water and sent for medical advice; the physician ascertained at eight o'clock, that he had taken 127 grs. of pure Arsenic, which had been given to him by mistake for Bi.-tart.-pot. They had no hopes of his ever recovering. He lived, however, and in five or six days he had gastritis, which lasted for several months; at the same time he had continued constipation of the bowels. He continued in this way for ten or twelve months. He suffered severely with cramps in the parts which became *paralyzed*; in a short time his cramps left him, and his gastritis began to get better. At this time, Aug. 1853, the cramps left him, and he lost the entire use of his arms, hands, legs and feet by *paralysis*, and at this time he was attacked with severe neuralgic pains in the parts paralyzed, in the thighs, legs, forearm and arms and hands, worst in feet and legs; cold was very distressing, could bear no warm food or drink, but external pain after eating, tenderness over liver and stomach. These neuralgic pains continued about two years and a half; they were then less frequent, and not quite so severe. They came on about four o'clock P.M., every day, and continued until about half past four or five o'clock in the morning. Nothing relieved him but very large doses of Morph.-Sulph.; the neuralgic pains began to decrease in their duration; they diminished about one hour every day until he was nearly well. In Jan. 1856, he began to use his arms and hands a little; has not taken any Morph. since July, '56; about this time he began to improve in his general health, and he began to walk a little. Before he took the Arsenic his weight was one hundred and seventy-five pounds; forty-three hours after, it his weight was reduced forty-two pounds. He is now, May 6, 1857, doing as well as he could expect. His feet are as yet partially paralyzed, and he suffers somewhat from neuralgia about three or four hours *every other* day or night. The pains come on at ten o'clock P.M. precisely, and

leave him at two o'clock, A.M., precisely. He is now in hopes that in a few months he will be entirely recovered.

Sensation was not entirely destroyed. Boiling water poured on the parts that were paralyzed could not be felt, but ice-water gave him great pain, particularly when neuralgic pains were present.

There was also a remarkable chilliness down the spine.

No fever at any time, no chills, but cold sweats, with excessive thirst; chronic cold sweats about legs and arms for six weeks; would wet the sheets with the sweats.

Excessive sensitiveness to cold; when asleep, the slightest draught of air, even over his face would wake him; the opening and shutting of the door would chill him disagreeably.

The cramps were worst in calves of legs and in thighs, but slightly in the arms and hands; the muscles could be seen working; the pains of the cramps were so severe that he could not help screaming out. The cramps were most severe from 6 A.M. to 9 A.M.; then every half hour or hour during the afternoon; from 8 P. M. to next morning he would have no cramps.

The neuralgia did not come on until the cramps ceased; were most severe in the same muscles in which the cramps had been.

The paralysis did not set in until just before the cramps left him.

The neuralgic pains did not leave him until the paralysis began to leave him.

Under the use of the galvanic battery the pains would leave him one hour earlier, and commenced one hour later; he could bear the shock so strong that it would knock a boy down; there were four thousand plates in the battery, a Hartford University battery.

The feet were entirely paralyzed, also the legs and hands; could move some of the muscles of the thighs and hips; the upper arms could be moved; could not feel a pin run into the flesh to the bone, but the slightest cold application would be felt.

Could not stand or walk for thirty-eight months; Strychnine did not benefit his paralysis; one-eighth grain doses Iodide of Potash as a duretic was the most useful remedy. Arsenic was detected in the urine. Commenced with two grains three times a day, and increased the Iodide one grain a day, until he took 120 grains a day; then diminished the doses; made seventy-five ounces of urine a day. When he commenced the Iodide was making thirty ounces per day; it increased to seventy-five ounces per day for months, and still makes two quarts per day; Iodide also caused perspiration; also acted on bowels; rather it did not purge but removed the obstinate costiveness.

CASE 10.—Peter Galpin, a laborer, aged twenty-seven, a powerful and robust young man of intemperate habits, attempted suicide by taking Arsenic. The quantity taken was not ascertained exactly, but it could not have been far from a scruple. Two hours had elapsed from the time it was taken, before treatment commenced. When the medical attendant arrived he had vomited twice freely, but without any relief. The family had given him copious draughts of a weak

infusion of tobacco, which produced no other effect than to aggravate his sufferings. His pulse was 130 per minute, small and wiry. He complained of great constriction and dryness of the fauces, but chiefly of a most agonizing pain and burning in the stomach; it seeming as he expressed it, as if it were filled with burning coals. As the length of time that the poison had been retained, precluded the idea of emetics, the calcined Magnesia was selected as the antidote, and drachm doses were prepared, to be given every hour in milk and water. At this time the pulse was 150, the constriction and dryness of the fauces extreme; the whole surface bedewed with perspiration; the pain and burning sensation in the stomach seemed augmented to the highest possible degree and *the right hand was entirely paralyzed*; in short, every thing betokened a speedy dissolution. Visiting him the next morning, instead of finding him dead, we found him quietly dozing in an easy-chair. The lady stated that after taking the first dose of Magnesia, he said he felt much relieved, and before the time for the second dose, he had fallen into a doze. She stated that each successive dose had produced the most surprising and marked mitigation of every symptom, and that long before morning he was entirely freed from suffering. (13. 46.)

CASE 11.—Three servant-girls in one of the Hebrides, ate a mixture of lard, sugar and Arsenic, which had been laid for destroying rats. The ordinary signs of irritation of the stomach ensued, but on the following morning were greatly mitigated. They were then ordered twelve grains of Liver of Sulphur every other hour. Soon afterwards the inflammatory symptoms became more severe, the root of the tongue swelled and inflamed, and in the afternoon two of them lost the power of speech and swallowing, and were attacked with *locked-jaw* and *general convulsions*. The third had not locked-jaw, but was otherwise similarly affected. On the morning of the third day one of the two former was found *comatose*, with continuance of the *locked-jaw*, and *occasional return of convulsions*: and on being roused by venesection and cold effusion, she complained of headache and heat in the throat. The Sulphuret of Potass. which had been discontinued on account of the locked-jaw, was then resumed. On the fourth day the headache increased, and the patient became delirious and unmanageable. The cold affusion, however, soon restored her again to her senses, and from that time her recovery was progressive. (13. 46.)

FORM 4th.—*Paralytic Cases.*

A common nervous affection in the advanced stage of the more tedious cases of poisoning with Arsenic is partial palsy. Palsy in the form of incomplete paraplegia, is a very common symptom, even of the early stage in animals, and has also been observed in man. The paralytic affection, however, is more frequent in the advanced stage, and in those animals who recover, an incomplete paralysis of one or

more of the extremities, resembling lead palsy, is often the last symptom which continues. (9. 46.)

CASE 1.—Dehaen relates a distinct example of this disorder occurring in a female, who took a small quantity of Arsenic by mistake. The ordinary signs of inflammation were soon subdued, and for three days she did well, but on the fourth she was attacked with cramps, tenderness, and weakness of the feet, legs, and arms, increasing gradually till the whole extremities became at last almost completely palsied, at the same time the cuticle desquamated. But the other functions continued entire. The power of motion returned first in the hands, then in the arms, and she eventually recovered; but eleven months passed before she could quit the hospital. (9. 46.)

CASE 2.—Four persons were simultaneously affected about an hour after breakfast, with the primary symptoms of poisoning with Arsenic, and some in a very violent degree. But besides these symptoms, in all of them the muscular debility was great, and in two it amounted to true partial palsy. One lost the power of the left arm, and six months after was unable to bend the arm at the elbow. The others had also great general debility, and long-continued numbness and pains of the legs. (9. 46.)

CASE 3.—A man, after taking Arsenic, was taken with vomiting, purging, and other symptoms of abdominal irritation, which were mistaken for dysentery. Five days afterwards he began to suffer also from feebleness of the limbs, amounting almost to palsy. Subsequently an improvement took place, but he continued to suffer under irritative fever, diarrhœa and faintness. Several weeks after the diarrhœa abated, but he had great stiffness, numbness, and loss of power in the joints of the hands and feet. (9. 46.)

CASE 4.—Two persons took about half a grain in soup twice a day for two days, and were attacked with the usual primary symptoms. One of them died in two weeks, gradually worn out, but without any particular nervous affection. The other was seized with convulsions, and afterwards with almost complete palsy of the limbs. Berndt relates a case arising from the Arseniate of Potash, in which the paralytic affection consisted in the loss of sensation and motion in the hands, loss of motion in the feet, with contraction of the knee-joints. (9. 46.)

Dr. Falconer observes in his essay on Palsy, that he has repeatedly witnessed local palsy after poisoning with Arsenic, and alludes to one instance in which the hands only were paralyzed, and to two others in which the palsy spread gradually from the fingers upward, until the whole arm was affected. On the whole the local palsy is the most frequent of the secondary effects of Arsenic. (9. 46.)

Occasionally, instead of being palsied, the limbs are rigidly bent, and cannot be extended. They were contracted as well as palsied in the case mentioned by Berndt. (9. 46.)

CASE 5.—A man took one-sixth grain doses of Arsenic for some time to cure a chronic eczema; he was attacked with jerks in the legs

and painful drawing proceeding from the back; general restlessness, formication, and trembling of the whole body; chilliness along the back and weakness of the muscles, especially of the legs, so that his walk became uncertain and stumbling. (4. 11.)

CASE 6.—Professor Malmsten reports two cases; in one, after the usual gastric symptoms, there was headache, inclination to delirium, followed by stupor for several days; then there were dull pains in the back, with painful fleeting stitches on the outside of the limbs, and numbness, first in the tips of the fingers, extending to hands and arms, and then to the toes, feet and legs. The power of motion and strength of the limbs diminished so much that he could scarcely hold anything in his hands, and his walk became uncertain and stumbling; he sweat much and passed a great deal of urine; the debility increased for several weeks, when the loss of sensation in his fingers was very great, in his hands less so, and natural above the wrist; there was also loss of sensation from the toes up to the knees; he could grasp objects, but could not hold them fast; his walk was staggering and stumbling, if he attempted to stand, he would fall, if not supported; it was also difficult for him to sit up; he could move his limbs with difficulty; he had formication in his fingers and toes towards evening, but not during the day. He was cured with *Arnica*, followed by *Nuxvomica*. (4. 11.)

CASE 7.—A child, twenty months old, swallowed a quantity of paste in which Arsenic was mixed for the purpose of destroying rats. This was at 4 P.M. At 6 the child had vomited much, had had two natural motions without pain, and was sleeping calmly; countenance natural, pulse 130; respiration a little hurried. At half-past 9, still sleeping, but restless; skin hot, pulse 140; no expression of pain. Soon after 10 o'clock became worse, extremities and face became cold; lips livid, eyes sunk, pupils fixed and rather dilated, pulse scarcely perceptible; respiration feeble, accompanied with sighing. After lying about half an hour in this condition, he expired without a struggle at half-past 11, nearly eight hours after the accident. (13. 46.)

Post-mortem.—The stomach and intestines exhibited little deviation from a healthy appearance. The former contained a small amount of mucus and a few particles of paste. The villous surface manifested no signs of inflammation. Two or three vascular patches hardly discernible only existed. (13. 46.)

CASE 8.—M. W. poisoned himself with a tea-spoonful and a half of Arsenic, and after suffering all the symptoms of acute arsenical poisoning, they succeeded in evacuating a great part of the poison and saving life. The vomiting did not cease for eight and forty hours. The gums swelled much; the mouth became sore, *with œdema of face and feet; paralysis of hands and feet*, with peculiar suffering in the circulatory organs; remarkably small and indistinct pulse, with a spasmodic kind of catch in the breathing, and according to her statement, a sensation in the head as if a carpenter were at work with hammer and chisel; a gritty feeling in the eyes, which she was continually

rubbing. After continuing in bed eight or nine days, she was able to get up, complaining only of *boils* in different parts, costiveness, conjunctivitis, lameness in walking, with *loss of feeling in the hands and feet.* (52. 46.)

Two cases have been lately recorded in which paralysis has followed the medicinal use of Arsenic in three minim doses for seven weeks. (13. 46.)

CASE 9.—Charles Wilson, aged forty-one, Swede, seaman, entered N.-Y. Hospital, 1st Dec., 1849. He states that accidentally, about five months ago, he swallowed some Arsenic, which had been laid aside for the purpose of killing rats; that remedies were promptly used which counteracted the primary effects of the poison; felt perfectly well for seven days afterwards; was then attacked at night with a *violent cramp* in index-finger of right hand, successively invading the other fingers and lastly the thumb, then attacking the other hand in the same manner, and finally the feet; the pain in the hands subsiding as the feet became affected; that the whole duration of the cramp was about thirty minutes, after which he fell into a sound sleep, which continued until morning; that when he awoke he felt free from pain, but on attempting to rise, was surprised to find that he *had lost the use of the affected parts*, and was in fact *perfectly helpless*; and that this *paralysis* has continued unchanged to the present time, accompanied with a feeling of heat and numbness which invaded the upper extremities from tips of fingers to a point about three inches below the elbow, and the legs from the toes to a point a little below the knee. Has also had lancinating pains in these parts, regularly commencing about 5 P.M., and continuing until midnight.

Present state.—*Paralysis and nocturnal pains* as above stated; can neither feed himself, nor stand alone when placed upon his feet. Has dryness of throat and great thirst; on 10th of January his urine was found to contain Arsenic estimated at 1-170,000th part; traces of it were no longer detectable on the 18th of May.

On the 14th of July, seven months and a half after his admission, he is reported as having slowly and steadily improved; had had no pain for some time save on the *approach of stormy weather*, when peculiar painful sensations were perceived in the fingers. He had taken Sulphate of Quinine, Strychnine and Electricity, and is finally reported as discharged relieved on the 15th of July.—[*N. Am. Hom. Journal*, 1851.

CASE 10.—Subject, H. P. Perkins, M.D., aged thirty-five years, and healthy; reported by Dr. Wetmore. On Saturday, July 24th, 1852, at a quarter to 5 o'clock, P.M., he sent for a small quantity of *Potass.-bitart.*, and took the powder brought him in ice-water with sugar and a little *Tr. Gent.-co.* on an *empty stomach*. Twenty-five minutes after he was seized with *giddiness* and *slight loss of vision*, burning sensation in the stomach, great coldness of the surface of the body and *profuse cold perspiration*, inclination to vomit and purge, without ability to do either, and very severe *cramp* in the stomach and

abdomen. Imagining that he had an *attack* of *cholera*, he took a large dose of Calomel, (40 grs.,) and a mixture composed of Peppermint, Rhu-barb, Opium, Lavender, and Cayenne-pepper, without relief. In about *an hour and a half* he *began to vomit*, with great difficulty, and some ten minutes after to purge, and, when this had continued fifteen or twenty minutes, to vomit and purge bloody matter. The latter did not cease till 3 o'clock, A.M., (Sunday, the 25th,) when he became quiet. At 3½ o'clock, *thirst commenced*, for the first time. He drank up all the water, tea, &c., he had by him, but the thirst increased and became distressing. This led him to suspect that he was poisoned. From this time till a little after 5, being unable to walk or arouse any one, he lay in great agony from thirst, praying for death—at length he was able to make himself heard by a servant, who brought him a pint of ice-water, which he drank at once and immediately threw it up. He then sent for the hydrated peroxide of Iron and a physician, who ascertained about 8 o'clock, that instead of the *Potass-bitart.*, he had taken 127 grs. of *pure Arsenic*. At 12 o'clock he fell asleep, and slept fifteen minutes, but seemed in great distress. His physician had no hope of recovery, but he thought himself that he should eventually get perfectly well. On Monday morning (26th)—*forty-three hours* after taking the Arsenic he was *weighed*, and was found to have lost in that time *forty-two pounds*.

From this time he suffered severely from *cramps, constipation* and *gastritis* until May, 1854, when he began to be relieved of his *cramps*, and the constipation and gastritis were much improved. He now (in the course of about a fortnight) *lost the entire use of his feet, legs, arms and hands*—and severe *neuralgic pains* set in and continued for two and a half years.

These were so violent that he could obtain relief only by very large doses of *Morphine*—he averaged daily, for eighteen months or more, 36 to 38 grs. Also, on one occasion he swallowed at once ʒviij. of Laudanum, without producing the slightest narcotism.

He is now (April, 1857,) entirely free from his gastritis, cramps, and constipation. His *breath* has a peculiar, very offensive pungent odor. *His feet are still partly paralyzed*, so that it is difficult for him to walk any distance, and there is but little sensation as yet below the instep. There is some soreness on motion and pressure, in the arch of the right foot. The neuralgia is nearly gone, and he hopes in a few months to be entirely well.

On inquiry, I was enabled to procure these few additional particulars: (11.)

Amongst the first symptoms he noticed, after he suspected that he was poisoned, were a *crimson line on the gums* (which he had remarked in other cases of arsenical poisoning) and *injection of the conjunctiva*, with symptoms of *iritis*.

His *mind* was all the time perfectly clear, and, with all his senses rather morbidly acute. He was for a long time troubled with bad

dreams and night-mare, which would dwell on his mind and annoy him during the day.

His *appetite* was usually inclined to be ravenous.

The *cramps* appeared to affect all the muscles of the inferior extremities at once, and especially he thought the *plantaris* of the right leg.

The *neuralgic pains* were confined to the *arms, below the elbows, and to the legs below the hips*, they did not seem to follow the course of the main nervous trunks. They were never darting in their character, but always steadily increasing to their climax and then gradually decreasing. Cold air or water would always bring them on—they were worst between 9½ o'clock, A.M. and 8, P.M.

The *paralysis* was of both motion and sensation—but he remained acutely sensitive in the paralyzed parts to cold.

Arsenical paralysis always commences at the extremities. It may be confined to the feet, to the hands, or even to the fingers. It has been known to creep progressively from the hand over the whole arm. It appears to attack more frequently the nerves of motion than those of sensation. Both these forms are often found associated, however, or perhaps anæsthesia alone is present. It (arsenical paralysis) is peculiar almost exclusively to the third form of poisoning. When the effect of the poison is quickly fatal, within twenty-four hours, for example, paralysis, as might be supposed, is very exceptional. It might be asserted, however, that its *principle* is present, for we always find an extreme prostration and extraordinary feebleness. (73. 46.)

The duration is variable. It may be four, six, seven, and ten months, or even years.

Along with the paralysis, are pains of the extremities, frequently of an excruciating character. Hahnemann has insisted upon the burning pain, (*brennende schmerzen*.) They may accompany the paralysis or may exist alone, and although exhibiting a preference for the extremities, they may also invade the spinal column. Quarin says in his old Latin, "I have had under treatment a patient, who, having taken Arsenic, was attacked with sharp pains in the joints, and with a slow fever; while upon his fingers and toes appeared tophaceous concretions." (73. 46.)

ANOMALOUS CASES.

CASE 1.—*Arsenic; Poisoning followed by Gangrene*.—M. FORGET, of Strasburg, has published the following case:—A man, sixty-three years of age, took two ounces of Arsenic; an hour afterwards vomiting came on, accompanied by colic and frequent alvine evacuations. Nine hours after the ingestion of the poison, the face was pale and haggard, the extremities cold, as well as the nose and ears; the pulse small and quick, the tongue moist and icy, and the weakness very great. There was much pain in the abdomen, the stools were very fluid, but the intelligence was clear, and the answers slow. (67 by 10.)

The patient took the sesquioxide of Iron, and Ether, and had sinapisms to the arms and legs. After this, vomiting recurred, and in two hours reaction was established; the extremities became warmer, and

the face was less pinched, and more animated. The reaction increased for a little while, but subsequently gave way, the symptoms became less marked, and two days afterwards the effects of the poison had entirely disappeared. *Severe pain in the left leg* was, however, complained of, and that limb was somewhat cold and tender on pressure. This pain went on increasing; *the pulsations of the femoral artery became gradually weaker, and mortification set in.* Amputation was performed ten days after the Arsenic had been taken, but the patient rapidly sank; *sphacelus occurred in the stump*, and he died twenty days after the taking of the Arsenic, and ten after the amputation. Here the patient survived a dose of poison far larger than one commonly looked upon as inevitably causing death. The next point of interest is the concomitance of the gangrene and poisoning, and it may be asked whether it were the age of the patient, or the Arsenic which caused the gangrene. (67 by 10.)

CASE 2.—A young woman dissolved two ounces of white Arsenic in a cup full of water, and drank it off, leaving about a table-spoonful of the powder at the bottom of the cup. In about an hour she was seen by the physician, who found her retching and sometimes vomiting, with violent spasms of the stomach and bowels, with a weak and quick pulse, affected frequently with a diarrhœa of a dark, bloody color, and often complaining of coldness of her extremities. She recovered in a few days, a result due doubtless to her early vomiting.—[*Med. Repos.*, Vol. 5, p. 43. (67 by 10.)]

CASE 3.—The family in which the fatal accident occurred consisted of six individuals and a maid-servant; the mother, Mrs. Gilton, three boys, and two girls. They all lived at home except the eldest son, who was away the greater part of the day. It appears that the manufacture of certain mineral colors was carried on at the premises, and that Arsenic was employed as one of the ingredients in this manufacture. It further appears that there was a well in the color-house where the operations were conducted, and that this well furnished water not only to the works, but also by pipes communicated with the house, where the water was used for ordinary domestic purposes. A short time previous to the first person being taken ill, a quantity of Arsenic had been thrown down a drain, which was subsequently found obstructed, and it is probable that rain-water percolating through this had carried a portion into the well. All of the family partook of the water on the premises, as did also a cow belonging to them. The workmen employed in carrying on the business did not take their meals at the house, and therefore took little or none of the water. (12 by 10.)

Mr. Bickersteth was first called to West Derby, where the family resided, on Monday, February 16, and found the mother in a dying state; unconscious; surface cold; the arms being in continued motion about her head. She died in a few hours, but before death consciousness returned for a short time. He was told that the youngest son had died a week previous, as it was supposed, from hydrocephalus. The symptoms, however, of both mother and child, appeared to have

been bilious vomiting and purging, with great thirst and head affections. On this visit the rest of the family looked rather ill, but did not make any complaint. Two days after, viz., February 18, Mr. Bickersteth was again sent for. The eldest son and one of the daughters were then suffering from bilious vomiting and purging, with great thirst, not, however, accompanied by pain or tenderness in any part. The daughter felt some curious sensations in her lower limbs; in both the pulse was very quick. (12 by 10.)

Mr. Bickersteth suspected that some poisonous substance had been taken, and finding the water which they used came from a well in the color-house, he thought it probable that Arsenic was present; he prohibited the use of the water, and took samples away, which were subsequently delivered to me for analysis by the brother of the deceased lady. Upon analysis the water was found to contain Arsenious-acid, or white Arsenic, in the proportion of four-tenths of a grain to the imperial pint. (12 by 10.)

The following day, February 19, the eldest son was better, and so was his uncle, who had only been there one day, and was seized after taking tea in the house. The two daughters and the youngest son were now suffering. The vomiting had ceased in the one first attacked under the administration of Prussic-acid, and had given way to nervous symptoms. There was great restlessness, indisposition to answer questions, *numbness of the lower extremities, whilst the arms were in continual motion in the air, as if picking at something above the head*; the skin was hot but not dry, and did not exhibit any discoloration; the tongue was dry and brown, and there was great thirst; the throat seemed dry, and the breathing was quick and audible; the pulse was very quick, 125 or 130, but not hard; the heart acted forcibly, but without friction sound, or murmur. The girls did not complain of pain on pressing the abdomen, but the youngest son slightly moved when this was done, though he said it gave him no pain. They had all uncomfortable feelings, which they could not describe, but were at his time conscious. (12 by 10.)

On the following day, the 20th, they were much worse. The breathing and pulse very rapid; *the tongue and lips dry, cracked, and covered with blood and sordes*. The eldest girl was unconscious, throwing her arms, legs, and body about in every manner. The other two exhibited the same symptoms as yesterday, only in an increased degree, and consciousness was fast departing. [There had been no purging or vomiting in the girls since Wednesday the 18th.] (12 by 10.)

On Saturday, the 21st, the youngest boy died at 4 P.M.; the peculiar movement of the arms continuing up to the time of his death. Between that period and Sunday night the two girls died. The servant early at this period was taken ill and went home; at a later time the cow was affected. The workmen, with one exception, were not sufferers. A short time after the servant was admitted to the fever hospital with symptoms purely nervous, and after a few days was discharged cured. (12 by 10.)

Post-mortem examination of the youngest son twenty-four hours after death. (12 by 10.)

There were no peculiar appearances noticed on the skin, and the muscles of the trunk were of their usual color.

The lungs were adherent on both sides by old adhesions posteriorly; both were *congested* with bloody serum, especially the right. The *bronchi were red and injected*, and covered with red mucus.

The heart and pericardium were both healthy-looking; and the blood in the body was dark and fluid generally, though there were coagula in the heart. (12 by 10.)

The trachea and epiglottis presented marks of inflammation.

The liver was slightly enlarged, presented exteriorly many yellowish green patches, and was internally of a uniform slate or ash color. Its consistence was normal; and the bile in the gall-bladder was copious and dark.

The œsophagus was healthy-looking. The stomach was contracted, contained some greenish fluid and mucus, but, with the exception of punctiform and ramified redness at the splenic and pyloric ends, presented no unusual appearance. The rugæ were red and vascular; the mucous membrane was not softened or ulcerated. (12 by 10.)

The commencement of the duodenum was red like the stomach. A few patches of redness existed in the jejunum, and the lower part of the ileum was discolored for about twelve inches, where the solitary glands appeared unusually large and numerous.

The cæcum was dark-colored and congested. The rectum and colon were also discolored here and there, but no ulceration or softening had occurred. The intestines contained a large amount of fæces. Spleen and kidneys were healthy.

Head.—Sinuses and veins congested; about a table-spoonful of serum existed at the base of the brain, and the same quantity in the ventricles; no softening or formation of false membrane was observed. (12 by 10.)

CASE 4.—A man, aged thirty, addicted to drinking, and while under the influence of liquor, took two ounces of *Arsenicum-album*, from which he suffered no inconvenience except a slight and sour smelling diarrhœa, accompanied with pain in the stomach and bowels. The stomach-pump and vomits of Lime were successfully employed, and ten days after the occurrence the patient was well again. (81 by 26.)

CASE 5.—A woman took two ounces of Arsenic; had the usual gastric symptoms; her face was bloated, with a most frightful expression of fear; the conjunctiva not very red, *but the ciliary vessels around the cornea were so much dilated that they resembled the vascular zone which attends acute iritis*; the hands and lower part of both fore-arms were as dark and livid as in malignant cholera. (4. 11.)

Post-mortem.—In this and many other cases, notwithstanding the tendency to lividity of some parts, the muscles were of a very bright red color, and very firm texture; great rigidity of the body; the left ventricle so hard from some contraction, that it resembled concentric hypertrophy; the ordinary vascular appearance of stomach and bowels.

OF LONG-CONTINUED SMALL DOSES, CAUSING SLOW OR CHRONIC POISONING.

Hahneman has most graphically described the condition of slow poisoning by Arsenic, and his description is quoted by Christison in his valuable treatise on Poisoning, and yet the pigmies of the Allopathic profession of the present day characterize the learned German by the opprobrious epithet of "quack"!!! (54.)

He calls it "a gradual sinking of the powers of life, without any violent symptom; a nameless feeling of illness, *failure of the strength*, an *aversion to food and drink*, and all the other enjoyments of life."

According to Pereira, the following are the symptoms produced by the long-continued use of Arsenious-acid:—Disorder of the digestive functions, characterized by flatulence, sensation of *warmth* or *actual pain* in the *stomach* and *bowels*; *loss of appetite*, *thirst*, *nausea* and *vomiting*; purging, or at least a relaxed condition of the bowels, and griping; *furred tongue*, with *dryness* and *tightness* of the *mouth* and *throat*, or with salivation; *quick*, *small*, and sometimes *irregular pulse*; oppressed respiration, with a dry cough. The body wastes, the stomach being frequently so irritable that no food can be retained in it. *Headache*, *giddiness*, and *want of sleep*, are frequently observed. The limbs become *painful*, *feeble*, *trembling*, subject to *convulsions*; occasionally benumbed and ultimately paralyzed. The cutaneous system is in some cases affected, an eruption makes its appearance, and now and then the hair and nails fall off. Œdema of the feet and face is not unfrequently observed; and under these symptoms the patient gradually sinks, in some cases retaining his consciousness to the last, but at other times delirium or stupor supervening. (54.)

CASE 1.—Dr. Jackson, of Edinburg, noted the symptoms of poisoning in a lady who was subject to the action of small repeated doses for eight weeks. The Arsenic here was introduced so slowly and its effects so gradually increased that we may take many of the symptoms as pathogenetic. Sickly look, small frequent pulse; frequent slight tickling cough, or rather hawking, without expectoration; occasional discharge of mucus from bowels, often tinged with blood; tenesmus and griping of some days' standing; flatulence; redness of eye-lids and lining membrane of nostrils; loss of appetite and failure of strength; restlessness at night; increasing weakness; dryness or tightness of throat, hoarseness of voice; later the stools assume a fatty appearance, owing to presence of pus, as proved by microscopical examination; tongue red and fiery, mouth and lips excoriated, anxiety and restlessness very great; percussion reveals tubercular infiltration at summit of both lungs, most in right, indolent in both, symptoms resembling tuberculosis of abdomen and chest; conjunctiva much injected; anus excoriated; hiccough, restlessness, and general distress, pulse 130, and feeble; urine scanty, high-colored, dense, albuminous,

depositing blood-discs and casts of uriniferous tubes of kidney. Died with tetanic spasms, with mental faculties perfect. (52 by 10.)

CASE 2.—Dr. Kelso observed the following symptoms from a small poisonous dose in a child:—Listlessness and indisposition to reply to questions; pulse 120, weak and unequal, occasionally fluttering; respiration regular, slow, and imperfectly performed; nausea, and inclination to vomit; heat and pain in stomach; pain in epigastric region, increased on pressure; alternate dilatations and contractions in rapid succession, and in extreme degree, of the pupil of either eye, especially of the right, increased on the approach of light or of a moving body; eye-lids drooping languidly, concealing to some extent the eye-balls; features generally relaxed, expressionless appearance of countenance; epigastric region considerably distended, and acutely painful on pressure; no evacuation either from the bowels or the bladder. (52 by 10.)

AQUA TOFFANA—ACQUETTA DI NAPOLI.

In the present place it may not be amiss to advert to the supposed effects of the celebrated Aqua-Toffana, or Acquetta di Napoli, a slow poison, which in the sixteenth century was believed to possess the property of causing death at any determinate period, after months, for example, or even years of ill health, according to the will of the poisoner. (9. 46.)

The most authentic description of the Aqua-toffana, ascribes its properties to Arsenic. According to a letter addressed to Hoffman by Garelli, physician to Charles Sixth of Austria, that emperor told Garelli, that, being governor of Naples at the time the Aqua-toffana was the dread of every noble family in the city, and when the subject was investigated legally, he had an opportunity of examining all the documents—and that he found the poison was a solution of Arsenic in Aqua-cymbalariae. The dose was said to be from four to six drops. It was colorless, transparent, and tasteless, like water. (9. 46.)

Its alleged effects are thus eloquently described by Behrends, in Uden and Pyls Magazine:—"A certain indescribable change is felt in the whole body, which leads the person to complain to his physician. The physician examines and reflects, but finds no symptom either external or internal—no constipation, no vomiting, no inflammation, no fever—in short, he can advise only patience, strict regimen, and laxatives. The malady, however, creeps on; and the physician is again sent for. Still he cannot detect any symptom of note. He infers that there is some stagnation or corruption of the humors, and again advises laxatives. Meanwhile the poison takes firmer hold of the system; languor, wearisomeness, and loathing of food continue; the nobler organs gradually become torpid, and the lungs in particular at length begin to suffer. In a word, the malady is from the first incurable; the unhappy victim pines away insensibly, even in the hands of his physician; and thus he is brought to a miserable end through months or years, according to his enemy's desire." (9. 46.)

An equally vigorous and somewhat clearer account of the symptoms

is given by Hahnemann. "They are," he says, "a general sinking of the powers of life, without any violent symptom—a nameless feeling of illness, failure of the strength, slight feverishness, want of sleep, lividity of the countenance, and an aversion to food and drink, and all the other enjoyments of life. Dropsy closes the scene, along with black miliary eruptions, and convulsions, or colliquative perspiration and purging. (9. 46.)

The last nervous affection to be mentioned is mania. The only instance Christison has found of it arising from Arsenic, is related by Amatus Lasitanus. He has not recorded the particulars, but merely says that the individual became so outrageously mad as to burst his fetters and jump out of the window of his apartment. According to Zacchias, Amatus was not very scrupulous in his adherence to facts in recording cases. (9. 46.)

ARSENIC-EATING.

A case in which a person was charged with poisoning, was tried at Cilli, in Styria. The victim was an old soldier, who died suddenly, and in whose stomach Arsenic was found. It is said that the court in submitting the case to the jury, asked the question, "Was the deceased an Arsenic-eater?" To which the jury replied, "Yes, he probably was." This question had reference to the fact, it is said, that in the provinces of Lower Austria and Styria, bordering on Hungary, it is quite common with men to chew Arsenic mixed with their bread, as the Chinese chew Opium. The absorption of the small quantity thus used, induces a fresh, clear complexion, and to a certain extent brightens the faculties; but with those who thus make a habit of eating it, there follows before long debility, and premature death. Females do not at all indulge in it, and the few men thus distinguished are known as *eaters of poison*. (39. 46.)

Dr. Tschudi states that the peasantry purchase it under the name of *hedri*, from wandering herbalists or peddlers, who obtain it from the Hungarian glass-workers, &c. These poison-eaters have a double aim; first they wish to give themselves, by this dangerous habit, a fresh and healthy appearance, and a certain degree of embonpoint. Many of the peasant girls, and even the men, have recourse to this expedient, from a desire to please and from coquetry; and it is remarkable what success they attain, for the young toxicophagi are distinguished by the freshness of their complexions, and by their aspect of flourishing health. The following is one of many instances:—A girl who attended cows, in good health, but pale and thin, having a lover whom she wished to attract still more, she had recourse to Arsenic, and took it several times a week. The desired result was soon attained, and after some months she became fat and chubby-cheeked. To carry the effect further, she increased the dose, and fell a victim to her coquetry—she died poisoned. The number of deaths from the abuse of Arsenic is by no means inconsiderable, especially among young people. Dr. Tschudi states that so careful are they to conceal

the fact, that it often is only revealed on the death-bed. The second advantage obtained by the toxicophagi is, that they become more free in respiration, and are able to ascend high mountains with ease. Upon long excursions into the mountains they take a bit of Arsenic, which they allow to dissolve in the mouth. The effect is surprising; they ascend in this way heights which would be insurmountable without it. They commence with a piece of Arsenic the size of a lentil-seed, or half a grain. They keep to this dose, which they swallow several times a week, morning and evening, for a long period, to become accustomed to it. Then they increase the quantity insensibly, but with precaution, until the desired effect is produced. A countryman, a sexagenarian, in excellent health, was in the daily habit of taking four grains. He had followed the habit forty years, and had transmitted it to his son. There was no trace of arsenical cachexia in this individual, no symptoms of chronic poisoning. It is to be remarked, however, that when the practice is dropped, emaciation generally ensues. The custom does not diminish the sexual passion, on the contrary, it increases it." (39. 46.)

This is the substance of Dr. Tschudi's statements, but all of them it will be seen, are unsupported assertions. (46.)

It may be as well to bring to mind a general use of Arsenic in Vienna, among the stablemen and coachmen of the great houses. They mix a good pinch of the powder with corn, put a piece the size of a pea in a linen bag and attach it to the bit of the horse; this produces a bright aspect of the skin, roundness and elegance of form, and foam at the mouth. The coachmen of the hills adopt the same practice before commencing a laborious journey; and horse-dealers carry with them small balls of Arsenic, to be given to those animals which they are leading to market. Should a horse thus treated fall into the hands of one who does not employ Arsenic, he gets thin, loses his freshness, becomes dull, and in spite of abundant food, does not recover his former sleekness. (39. 46.)

This last paragraph we take from *Wharton and Stillé's Medical Jurisprudence*, they copying from the *Medical Times and Gazette*, of July, 1854—the article, however, originally appeared in the *Gazette des Hopitaux*, of May 16, 1854. (46.)

A doctor, whose name at this moment escapes me, has given for a period of nine or eleven months, increasing doses of Arsenic to animals; beginning with $\frac{1}{195}$ of a grain, he finally gave fifteen grains daily, with no diminution of their health or spirits. (46.)

Christison, however, unequivocally says that the tendency of habit to modify the action of Arsenic is questionable. So far as authentic facts go, habit has no power of familiarizing the constitution to its use. One, no doubt, may hear now and then of mountebanks who swallow without injury entire scruples or drachms of Arsenic, and vague accounts have reached me of patients who took unusually large doses for medicinal purposes. But as to facts of the former kind it is clear that no importance can be attached to them; for it is impossible to

know now much of the feat is genuine, and how much legerdemain. With respect to the latter facts, I have never been able to ascertain any precise instance of the kind, and so far as my own experience goes, the habit of taking Arsenic in medicinal doses, has quite an opposite effect from familiarizing the stomach to it. (9. 46.)

1st. M. Kesteren says that the evidence upon which these statements have been made is simply the loosest kind of hearsay evidence. Neither Dr. Von Tschudi, Mr. Boner, Dr. Johnston, Dr. Kaltenbrunner, nor Dr. Vitzhum, have personally observed or watched the Arsenic-eater, although the two latter are residents in parts of Styria where it is alleged that Arsenic-eating prevails. All of them have received their information from other persons. (13. 46.)

2d. No chemical analysis of the excretions, nor any post-mortem, nor chemical examination has ever been had of the organs of those who have indulged in Arsenic-eating.

3d. No analysis has been had of the so-called Arsenic. (13. 46.)

4th. Its alleged effects are totally at variance with all other experience of it as a remedy or poison, while its consequences, (which we always find following its administration and ceasing on its withdrawal,) are in the case of the Styrian peasants totally reversed—immunity attending its use, poisoning arising on its cessation. [It may be true in the case of such poisons as the system may become tolerant of, (Opium, &c.,) but it can hardly hold good of one of the most essentially *cumulative* poison which we have. Its effects, so far from becoming more tolerable to the system by use, seem to accumulate by its continuance, even in small doses, and finally burst suddenly out into all the symptoms of irritant poisoning; and these symptoms subside at once on the drug being discontinued.] (46.)

5th. No mention has been made of the effects of Arsenic upon the systems of those unaccustomed to its use, the beginners in the practice; and surely no one would be so bold as to assert that the Styrian peasant can do what no other human being is capable of, viz., take a grain or two of Arsenic for the first time, without any effect. There is a want of statistical information as to how many are killed by the habit, or in the process of initiation, a fact which of itself throws the gravest doubts upon the story, as the most trivial inquiry must have revealed a certain amount of mortality from this cause, more surely than from its occasional excess, or want of the poison. (13. 46.)

6th. No information is tendered as to how long this practice has obtained. It is quite certain that it could not have existed without having attracted the attention of the resident medical practitioners, since some of the accounts state that many have pursued the practice for twenty or thirty years. One man is reported by Dr. Von Tschudi to have eaten Arsenic for forty years, and to have inherited the practice from his father. Where did it originate, and how is it that it has only just come to light? (13. 46.)

7th. In Cornwall, where Arsenic is prepared, no such practice prevails. Supposing the story true, the same might have been expected

of the Cornish peasantry; the absence of the practice among the latter, augments the incredibility of the former. Again, the destruction to the lower animals and to vegetation by its inhalation, and of *chronic skin disease by its external irritation*, observed in the mining districts of Cornwall, has been altogether overlooked in the searching for the marvellous, among the Arsenic-eaters of Styria, where it is said to give health, vigor, and beauty. (13. 46.)

The medico-legal importance of this question induced the author to examine its grounds—and it has been shown that the story wants verification—and as far as information has been procurable, the assertions are without any of the elements of proof. (13. 46.)

CASE 1.—Tschudi, in speaking of an Arsenic-eater, who from his twenty-seventh year, every month near full moon, for eight or ten days, took small portions of Arsenic, pure, gradually increasing the dose to three or four grains; on one occasion took a larger dose than usual, was seized with violent colic and *burning* in throat and œsophagus. A friend of his told him if he continued on in this course, that he would die of dropsy, and he was thus persuaded to leave off. Since then he has had frequent attacks of gastrodynia. This habit had continued thirty-five years, and he had taken in all about twenty-two ounces. A constant hoarseness of voice is peculiar to Arsenic-eaters. (81 by 26.)

CASE 2.—The director of an Arsenic mine had been in the habit of taking three to three and a half grains of powdered Arsenic every morning with his coffee; the same practice is pursued by his workmen. He considers this the best method of guarding those exposed in the mines against the ill effects of Arsenic, and indeed it is asserted that all the men so employed enjoy excellent health. (81 by 26.)

TESTS FOR ARSENIC.

As small a quantity as 100,000th part of an aqueous solution, acidulated by Hydrochloric-acid may be detected by boiling in it a slip of bright copper—a grey film of Arsenic being deposited upon the copper. (10.)

The above is a slightly imperfect and partially incorrect account of Reinsch's well-known exceedingly simple and efficacious method of detecting Arsenic. If the copper is put into the acidulated fluid *before it is duly heated*, i. e. to the boiling point, a stain will almost always occur in the presence of organic matters. Supplementary tests are also requisite, since solutions of various metals give a coating not unlike that of metallic Arsenic. Hence the copper being removed from the acidulated and heated fluid, after the deposit is formed, must be washed in distilled water, dried and introduced into a reduction tube. On the slow application of heat, Arsenious-acid will be sublimed and deposited on the sides of the tube in the form of minute octahedral crystals. These may be examined by a lens, and then dissolved in water and subjected to the liquid tests. (39. 11.)

When *powdered Arsenious-acid* is boiled in distilled water, it is very

slowly dissolved, part of it floating on the surface of the liquid, or aggregating, in small lumps, at the bottom of the vessel. (3. 46.)

A clear watery solution of *Arsenic* has a very feeble reaction on litmus. Its taste is feeble. By evaporation on a glass plate it yields octohedral crystals. It yields a white precipitate with Lime-water; a yellow color, and, on the addition of Hydrochloric-acid, a yellow precipitate with sulphuretted Hydrogen-water; a green precipitate with ammonio-sulphate of Copper; a yellow precipitate with ammonio-nitrate of Silver; it evolves arseniuretted Hydrogen-gas when mixed with Zinc, and either Sulphuric or Hydrochloric-acid (*Marsh's test*); and, lastly, when boiled with Hydrochloric-acid and clean Copper foil, it gives a grey metallic coating to the latter, (*Reinsch's test*.) (3. 46.)

LIME-WATER.—The Lime-water test gives a white precipitate, soluble in most acids. The *impediments* to the operation of it are a large quantity of water and free acids, which hold it in solution, and gelatinous and oleaginous liquids which keep it suspended. The *fallacies* are carbonates, oxalates, tartrates, and phosphates, which also throw down white precipitates with Lime-water. (3. 46.)

AMMONIO-SULPHATE OF COPPER.—If a dilute solution of Sulphate of Copper be added to a solution of Arsenious-acid, a pale green precipitate, (*Arsenite of Copper, called Scheels green*), soluble both in Nitric-acid and Ammonia, is obtained, and Sulphate of Ammonia with excess of Ammonia remains in solution. It is done as follows: Add (cautiously) Liquor-ammonia to a diluted solution of the Sulphate of Copper, so as to redissolve the Oxide of Copper, which is at first thrown down. Care must be taken not to employ too much Alkali, otherwise the test will not act. Moreover, the solution must not be concentrated, or the precipitate will not be obtained. The *impediments* are astringents, tea, infusion of galls, &c., which prevent the characteristic action. The *fallacies* are yellow-colored and other organic liquids, as decoction of onions, which give a green color and slight precipitate, (with the blue test), even though no Arsenic be present. (3. 46.)

AMMONIO-NITRATE OF SILVER: (*Hume's test*.)—If a solution of Ammonio-nitrate of Silver, be added to a solution of Arsenious-acid, a yellow precipitate, Arsenite of Silver, takes place, and Nitrate of Ammonia, with excess of Ammonia, remains in solution. The precipitate is soluble in liquid Nitric-acid, in solution of Ammonia and in solution of Nitrate of Ammonia. The mode of preparing this test is as follows: Add a few drops of Liquor-ammonia to a solution of Nitrate of Silver, so that the Oxide of Silver, which the alkali at first throws down, may be nearly, but not quite redissolved. Great care is requisite to add neither too much nor too little; for, if too much be employed, the solution will not occasion any precipitate with Arsenious-acid, and, if too little, it will produce a precipitate with Phosphate of Soda, similar to that produced with Arsenious-acid. The only proper way of knowing when the proper quantity has been employed is to test the solution. Arsenious-acid, but not Phosphate

of Soda, ought to occasion a precipitate with it. The *impediments* are free acids, chlorides, and organic matters. The acids may be readily neutralized by an alkali. If common salt or other metallic chloride be present, Ammonio-nitrate of Silver throws down a white precipitate, even though a considerable quantity of Arsenic be present. To obviate this, add a few drops of Nitric-acid, then an excess of solution of Nitrate of Silver. Filter, to get rid of the precipitated Chloride of Silver, and apply the Ammonio-nitrate of Silver. The presence of much organic matter impedes the action of the test.

Its *fallacies* can hardly be called such. Ammonio-nitrate of Silver, when properly prepared, does not occasion a yellow precipitate with any substance save Arsenious-acid; and hence it is not subject to any *fallacy* of that kind. If, however, it be not properly prepared, it may occasion a yellow precipitate (*Phosphate of Silver*) with Phosphate of Soda. There is an optical fallacy against which the student ought to be upon his guard; if Ammonio-nitrate of silver be added to certain yellow liquids containing common salt, a white precipitate (*Chloride of Silver*) is produced, which seen through a yellow medium, might, by a careless observer, be mistaken for a yellow precipitate. (3. 46.)

HYDRO-SULPHURIC-ACID.—This test may be employed either in the gaseous form or in the form of sulphuretted Hydrogen-water. The former is to be preferred. If sulphuretted Hydrogen-water be added to a solution of Arsenious-acid, the liquid is rendered yellow; and, on the addition of a few drops of a strong acid, like hydrochloric, a yellow precipitate falls. If the gas be passed through a solution of Arsenious-acid, the same yellow precipitate is produced. In order, however, that this may take place, the liquid must be slightly acidified by Hydrochloric-acid. If it be already acid, it should be neutralized by an alkali, and then acidified with Hydrochloric-acid. The precipitate is yellow, insoluble in Hydrochloric-acid, readily soluble in Liquor-ammoniæ, forming a colorless and very limpid fluid, and yields metallic Arsenic, when dried and heated with Soda-flux or Potash-flux.

Hydro-sulphuric-acid gives with the Salt of *Cadmium*, a yellow precipitate, insoluble in Liquor-ammoniæ, and soluble in Hydrochloric-acid.

Perchloride of Tin yields a yellow precipitate, soluble, though with difficulty, in Liquor-ammoniæ, and soluble in concentrated Hydrochloric-acid.

A solution of *Tartar-emetic* yields, with Hydro-sulphuric-acid, an orange-red precipitate, which is soluble both in Liquor-ammoniæ and Hydrochloric-acid. Dilute solutions of *Tartar-emetic* yield paler-colored precipitates.

The *Bi-hydrosulphate of Ammonia*, has been employed as a substitute, but is very fallacious. When fresh it turns solutions of Arsenic yellow, Tartar-emetic red, and lead black; but, after exposure to the air for a day or two, it forms a white precipitate with Arsenic, yellow with Tartar-emetic, and red with lead!! (3. 46.)

Marsh's Test: If Arsenious-acid be submitted to the action of Zinc or diluted Sulphuric-acid, arseniuretted Hydrogen-gas is evolved. Mix a small portion of the suspected liquid with some dilute Sulphuric-acid (1 to 7 or 8) and pour the mixture over some pieces of Zinc, previously introduced into a proper apparatus; bubbles of air immediately make their appearance. If no Arsenious-acid be present, the gas evolved is Hydrogen, but if the liquor hold Arsenic in solution, arseniuretted Hydrogen-gas is formed. Care must be taken not to apply the flame to the gas jet before the air is expelled, or an explosion may be the result. The gas is recognized by, first, its having an alliaceous odor; second, it burns with a bluish white flame, and the evolution of a white smoke (Arsenious-acid); third, its flame deposits on a cold piece of mica-glass or porcelain, held in the upper part of it, a black spot or ring, surrounded by a larger white ring of Arsenious-acid; fourth, if the gas be transmitted through a glass tube, heated to dull redness, it is decomposed into its constituents, the metallic Arsenic being deposited in the tube; fifth, if arseniuretted Hydrogen be transmitted through a solution of Nitrate of Silver, free Nitric- and Arsenious-acids are formed in solution, while metallic Silver is precipitated. This reduction of Silver may be conveniently shown by wetting a piece of bibulous paper with a solution of Nitrate of Silver and exposing it to a current of the gas. (3. 46.)

Reinsch's Test:—If an aqueous solution of Arsenious-acid be boiled with pure Hydrochloric-acid, and clean Copper foil, or fine Copper gauze, or Copper wire, the latter acquires an Iron-grey metallic coating of metallic Arsenic. If the coated Copper be washed, dried, cut into small pieces, and then heated in a glass tube in the flame of a spirit-lamp, the metallic Arsenic is volatilized, and if the experiment be performed in a tube of very small diameter, it sometimes yields a metallic ring; but, in general, it becomes oxidized and yields a sublimate of minute octohedral-crystals. If the coating be sufficiently thick, it may be scraped from the Copper and heated alone in the tube. The obtained Arsenious-acid should be dissolved in water, and tested with Ammonio-nitrate of Silver, and Hydro-sulphuric-acid. (3. 46.)

Reduction Tests.—Formation of a metallic crust.—If Arsenious-acid be intimately mixed with freshly-ignited but cold Charcoal, or still better with a mixture of Charcoal and Carbonate of Soda (the residue obtained by incinerating in a covered crucible, tartrate or acetate of Soda), and heated in a glass tube, the acid is de-oxidized and yields metallic Arsenic, which is sublimed into a cooler portion of the tube, when it condenses and forms a metallic crust. A common cylindrical test-tube answers very well, but the reduction tube of Berzelius is to be preferred. The characters of the Arsenical crust are the brilliancy of its outer surface, which is frequently equal to polished steel, or looking-glass; the crystalline appearance and greyish-white color of its inner surface, its volatility, its conversion, by sublimation up and down the tube, into octohedral crystals of Arsenious-acid, which may be dissolved in water, and tested by the liquid reagents. (3. 46.)

ANTIDOTAL TREATMENT.

Sometimes from one-half to one and a half ounces of Arsenic may be given to horses, without bad effects during life, and no morbid appearance after death; but two ounces will generally produce death in two or three days. Frank reports three horses killed with two-ounce doses, without any antidotal treatment. Then a number of horses, poisoned with two-ounce doses of Arsenic were treated with the hydrated peroxide of Iron. (4. 11.)

CASE 1.—A nine year old horse took two ozs. of Arsenic, followed immediately by four lbs. of Ferri-oxydat-hydrat., in eight litres of water. No symptoms ensued, and it was killed at the end of nine days; a few erosions were found in the stomach.

CASE 2.—A seven year old horse was treated in the same way, with a two-oz. dose of Arsenic, followed at once by four lbs. of Ferri-oxydat-hydrat. No symptoms followed and it was killed on the eighth day; only very slight inflammation of duodenum was found. (4. 11.)

CASE 3.—An old horse was experimented on, in the same way, without effect, and was killed on the nineteenth day. There was slight effusion into the abdomen, slight false membranes of new formation on the colon, with irritation, congestion, some inflammation and erosion of the stomach and bowels. (4. 11.)

CASES 4 and 5.—Two horses took Arsenic as above, and one took the antidote two hours, and the other four hours afterwards. They both remained well, and were killed on the eighth and eleventh days; both showed slight traces of inflammation and erosion of the stomach and bowels; one had a copious effusion of yellowish serum into the cavity of the abdomen. (4. 11.)

CASE 6.—The antidote was not given until five hours after the poison had been taken; the horse died in twenty-four hours, with all the signs of arsenical poisoning, both before and after death. (4. 11.)

From other experiments it was proven that the hydrated Peroxide of Iron will not neutralize the Arseniate of Potash, but Arsenious-acid only. (4. 11.)

CASE 7.—A man, aged fifty, took *z*ij. of Arsenic; six hours elapsed before he came under treatment. He had the usual gastric symptoms, for which Milk, Albumen, and Ipecac. were used; the hydrated-Oxide of Iron was not used until ten hours had elapsed, then it was taken, to the extent of ten ounces, with great improvement, up to the evening of the fifth day, when collapse sat in, with stupor and slight delirium, and death on the seventh day. (4. 11.)

Our esteemed friend, Dr. Wilson, of this city, informs us that he has employed Tincture of Tobacco, in several cases of Arsenic-poisoning with entire success. This gentleman has given to dogs as much as three grains of Arsenous-acid at a dose, and entirely antidoted its effects with Tincture of Tobacco. In those instances where the antidote had not been administered until vomiting, purging, and red-

ness of the conjunctiva had made their appearance, one or two doses of the Tobacco sufficed to arrest all toxical phenomena, and speedily restored the health. Its homœopathicity to many of the physiological effects of arsenic render it peculiarly appropriate, after the hydrated Peroxide of Iron has exercised its antidotal chemical action. (10.)

Of nineteen dogs, poisoned with Arsenic and bled, sixteen died; of thirty treated with stimulants, eleven died; of nine without anything, eight died. Those treated with stimulants also recovered more quickly. (11.)

EXTERNAL USE.

The symptoms arising from the external or topical application of Arsenic, are very similar to those produced when administered through the stomach, with the exception of the immediate local lesion. On man it has been known to act through an ulcer or wound, the inner membrane of the rectum, the membrane of the vagina, the membrane of the air tubes, the membrane of the nose, and even the sound skin. (9. 46.)

Many persons have been poisoned by the application of Arsenic to surfaces deprived of the cuticle, such as blistered surfaces, eruptions, ulcers, or wounds. When applied in this manner it commonly induces both local inflammation and constitutional symptoms. Amatus Lusitanus relates the case of a young man, who, against the advice of his physician, annointed an itchy eruption of the skin, with an Arsenical ointment and next day was found dead in bed. A similar case, not so rapidly fatal, has been recorded by Wepfer. A girl, affected with psoriasis of the scalp, had it rubbed with an ointment of butter and Arsenic. In a short time she was seized with acute pain and swelling of the whole head, fainting fits, restlessness, fever, delirium, and she died within six days. Zitman has noticed the cases of two children, eight and ten years of age, who were killed by the application of an Arsenical solution to a similar eruption of the head; and Belloe relates the case of a woman who, trying to cure an inveterate itch with Arsenical lotion, was in consequence attacked with severe erysipelas of the whole affected part, succeeded by tremors and gradual exhaustion of the vital powers, ending fatally in two years. M. Erard has met with two cases, when in consequence of a freshly blistered surface being dressed with an ointment made of the stearine of arsenicated candles, local pain, nausea, pain in the stomach, urgent thirst, redness of the tongue, involuntary contractions of the muscles of the extremities, and weakness and irregularity of the pulse came on, and one person died within twenty-four hours, while the other recovered, chiefly because the dressing caused so much pain that the patient could not keep it on long. (9. 46.)

CASE 1.—*Death from the external application of Arsenic.*—In this case Arsenic was applied ignorantly, upon the recommendation of a friend, to the heads of three children suffering from porrigo favosa. Two of them were found with their faces swollen and œdematous, par-

ticularly about the eyes, and the skin red and shining. The scalp was covered with a copious eruption of *porrigo favosa*; the Arsenic had been applied thirty-six hours previously. She had obtained six pence worth of Arsenic, had mixed it with a gill of gin and rubbed it well into the children's heads; but not satisfied with this, she had applied at a dispensary and obtained the Ung.-hydrarg.-oxyd.-rub., which had also been applied, some little time after the Arsenic. The youngest child, (about two years of age) was pale, and there was no sign of inflammation of the scalp, but it was suffering from diarrhœa and tenesmus, with great weakness of the lower extremities. The same night it died, its lower extremities having first become entirely *paralyzed*. The mother stated that on one previous occasion, she had applied the Arsenic but it had been followed by no ill consequences, with the exception of some swelling; that this had soon subsided and the child had appeared better. No post-mortem was made, so it was impossible to say if there were any internal lesions of organs. (9. 46.)

Next, as to *ulcers*. M. Roux has noticed the case of a girl, who was killed by an application of the Arsenical paste to an ulcer of the breast, and in whom the constitutional symptoms were strongly marked, although the quantity of the poison must have been very small. The preparation used, which contained only a twenty-fourth of its weight of Arsenic, was applied for a single night on a surface not exceeding an inch and a half in diameter. Yet she complained next day of violent colic, and vomited frequently, the countenance soon became collapsed, and she died two days afterwards in great anguish. Another instance of the like kind is related in the "*Annales d'Hygiène*"—and, in fact, they are too numerous to need citation. (9. 46.)

There is a singular uncertainty in the effects of Arsenic, when applied to ulcerated surfaces. Some persons, like Roux's patient, are obviously affected by a single application, while others have had it applied for a long time without any other consequences than the formation of an eschar at the part. Two causes have been assigned for these differences, and probably both are founded on fact. One, which was assigned by Mr. Blackadder, is the relative quantity of Arsenic applied. He says he never witnessed but one instance of its acting constitutionally, although he has often applied it to sores; and he imputes his success to his having always used a large quantity. For he considers that, by so doing, the organization of the part is destroyed, and absorption prevented, but that if the quantity be small, as in the mode practiced by Roux, it will cause little injury and readily enter the absorbing vessels. (9. 46.)

Another unequivocal cause is pointed out by Harles. He remarks that it may be applied with safety to the abraded skin, to common ulcers, to wounded surfaces, and to malignant glandular ulcers, even when highly irritable, provided the part be not recently wounded so as to pour out blood. The reason is obvious;—the application of the poison to open-mouthed vessels, is the next thing to its direct intro-

duction into a vein. It is some confirmation of Harles' opinion, that Roux, whose patient was so easily affected, recommends that before Arsenic be applied to an ulcer, a fresh surface be made, by paring away the granulations. (9. 46.)

The symptoms vary in their nature. Sometimes the chief disorder is inflammation, spreading over and around the original sore, sometimes inflammation of the alimentary canal, sometimes an affection of the nervous system. In general, the sufferings of the patient, both from the local inflammation and constitutional symptoms are very severe. But this rule has its exceptions. In Pyl's memoirs there is the history of a child, who died four days after an itchy eruption of the whole body had been washed with an arsenical solution, and signs of vivid inflammation were found after death in many parts; yet she appears only to have complained of headache. Occasionally too, without exciting either inflammation of the part, or disorder of the stomach, or a general injury of the nervous system, it seems to give rise to *partial palsy of the muscles* adjoining the seat of its application. (9. 46.)

It has also been applied to the rectum and vagina. Foderé has noticed a case which happened in France. A lady died suddenly and it was discovered that her servant has administered Arsenic to her in enema. (9. 46.)

CASE 2.—A middle-aged female was seized with vomiting, diarrhœa, swelling of the genitals, and uterine discharge, and soon expired. She told one of her neighbors, that her husband, after repeated attempts, had succeeded in poisoning her, by introducing a powder into her vagina, while in the act of enjoying his nuptial rights. The vulva and vagina were gangrenous and the intestines inflamed. (9. 46.)

Another case happened in Finland, where three women were poisoned in this way. The man was a farmer, near Copenhagen, and as soon as he tired of his wives he would introduce a powder of Arsenic and flour into the vagina on the point of the forefinger; soon after he would marry one of his maid-servants. On the third repetition of this it was discovered. (9. 46.)

CASE 4.—Prof. Robertson, of Calcutta, while exhibiting Marsh's test to the class, inhaled some of the arseniuretted Hydrogen-gas. He soon became aware of a sense of burning in the throat, and next day he had an intense acrid burning sensation, from the pharynx to the lower extremity of the alimentary canal, excessive irritability of the stomach; vomiting, first of food, then of bile, ultimately of dark coffee-ground looking matter, consisting of broken-down blood-corpuscles, and desquamated epithelium of the stomach and lower parts of the œsophagus and obstinate constipation of the bowels. There was severe, deep-seated pain in the lumbar region; he voided between three and four pints of bloody urine, which, on being analyzed, exhibited minute traces of Arsenic. Symptoms of great constitutional disturbance were present; considerable fever; full, hard, frequent, incompressible

pulse ; dry, hot, unperspiring skin ; intense restlessness, anxiety and general uneasiness ; a pale, anxious countenance, and considerable prostration of the vital powers. On the third day, the bowels not having been opened, and there being a good deal of tenderness in the left iliac region, with a sense of weight and dragging in the fundament, a dose of Castor-oil and Laudanum produced a copious clay-colored evacuation, with a tubular, membranous-looking slough, somewhat ragged in appearance and about four inches long. It was a portion of the lining membrane of the rectum. The symptoms gradually improved from this time. (9. 46.)

CASE 5.—A farm-servant was affected with inflammation of the skin of the lower part of the abdomen, the penis, scrotum, and upper part of the thighs, running on in some places to ulceration, consequent on exposure for two hours to a solution of White Arsenic. He had been engaged in washing sheep, in a bath composed of Arsenic dissolved in boiling water. In the evening, he complained of pain and smarting, and the following morning the skin was red and inflamed. He had severe burning pain, and considerable constitutional derangement. It was a fortnight before he could return to work. The solution consisted of two pounds to fifty gallons of boiling water. (18. 46.)

CASE 6.—A man was poisoned during the manufacture of composition candles, in which Arsenic was contained. He first complained of his hand being swollen on Wednesday, but was not seen by a medical man until Saturday morning. The left hand and forearm, and glands of the axilla were much swollen, and there was an abrasion at the back of the hand. The angry appearance of the limb, evidently showed poisoning, and saline draughts, fomentation, and poultices were ordered ; but the patient got worse, purple patches appeared on the arm and side, and he died on Monday. From the evidence of his employer, it appears that two ounces of Arsenic per hundred weight only were used. No post-mortem was held, unfortunately, by which the extent of the internal lesions could be ascertained. (13. 46.)

CASE 7.—A man, in the habit of powdering Arsenic for apothecaries, worked at this for two days, and pulverized three pounds of Arsenic ; he worked with his cap pulled down over his eyes and a four-doubled towel over his mouth and nose. (4. 11.)

On the second day, he was obliged to *urinate* frequently ; then vomiting of mucus and *blood* set in ; he had burning pains in the nose, mouth, and eyes ; his saliva was profuse and bloody ; swallowing was painful and difficult ; on the third day his breathing was painful, and he felt hot stitches all over his body ; on the fourth day there was swelling and insupportable burning of the penis, pain in urinating, vesicles on his hands, thumbs and forehead ; painful swelling of the right arm and hands ; his face was covered with pustules, his eyes were red, his eyelids swollen and red-streaked ; his chest and stomach painful. On the fifth day, he had medical advice : his pulse

was weak and frequent, respiration oppressed, stomach painful, his kidneys, bladder, and penis caused him frightful pains, and there was retention of urine. (4. 11.)

CASE 8.—A boy, aged six years had Arsenic, mixed with Olive-oil, rubbed into his head, to kill lice. He went to bed bright and well, waked up with severe headache, had frequent vomitings, and was swollen all over his body. By the next evening, the whole body was swollen in an extraordinary degree, and covered with bluish vesicles; his pulse was miserable; he had cold and viscid sweats on his head and forehead; frequent fainting fits and slight convulsions of the facial muscles; he died in twenty-four hours. (4. 11.)

CASE 9.—A hearty farmer, aged twenty-five, applied a strong solution of Arsenic, to cure the itch, over his whole body, three times a day. Soon after the first application he experienced violent pains over the whole body, as if he lay upon a fire or upon needles; these pains increased, the skin raised in large vesicles, spontaneous vomiting occurred after every meal, and death ensued on the third day. (4. 11.)

Post-mortem: Almost the whole body was stripped of its skin; there was inflammatory redness of the stomach and duodenum; the hair came out very easily. (4. 11.)

CASE 10.—A man employed to grind and sift Arsenic, kept a cloth over his mouth and face; but, soon after his work was finished, his scalp was found covered with several hard, isolated pustules; the whole face and both ears were extraordinarily swollen, and covered with a *dark erysipelatous redness* and *large vesicles*; the hands and other covered parts of the body were effected in a lesser degree, with the exception of the scrotum, which was greatly swollen and covered with bullæ, which soon burst and assumed a perfectly gangrenous appearance.

To these were added violent pains, drawings and throbbings in the head, vertigo, *delirium*, sleepless nights, *violent pains and jerks in the limbs*; trembling of the hands, great anxiety and oppression of the chest, *dryness of the tongue*, occasional vomiting, with violent fever, and a quick, hard pulse. He recovered in four weeks, but his *hair fell out*, and pains in his limbs lasted a long time. (4. 11.)

Clinical Remarks.—Arsenic, in these cases, seemed to act like the poison of severe or malignant erysipelas. (11.)

CASE 11.—A drachm of Arsenic, in two ounces of Flaxseed, was applied to an old foot-ulcer. In two hours severe pains extended up the leg to the abdomen and sacrum; bilious vomiting, and three diarrhetic stools had occurred; the vomiting and diarrhœa lasted all day, the abdomen was distended and painful to touch, and the pulse febrile. On the third day, the diarrhœa had ceased, but the vomiting continued; there was also increased secretion from the *irritated eyelids and nostrils*, which lasted for a long time, in connection with roaring in the ears. (4. 11.)

CASE 12.—By mistake, powdered Arsenic was sprinkled on a sore place in the bend of the thigh, in a child aged four years. Violent

inflammation ensued, spread quickly up to the navel, and changed to gangrene; vomiting, diarrhœa, and meteorism of the bowels occurred, and death on the seventh day. (4. 11.)

SKIN.

The cutaneous system is always more or less affected by the long-continued employment of small doses. Its pathogenetic action upon the skin is manifested in various forms, depending upon the size and mode of administration of the doses, and the constitution, dyscrasia, and idiosyncrasy of the prover. In most instances, it is probable that Arsenicum merely operates as the agent, in developing upon the surface some internal latent humor. This appears evident from the fact that, in almost every case the eruption, which is thrown out under the use of the acid, is but a re-appearance of one which had previously existed. Hence, we have among the physiological effects, pustular, urticarious, miliary, scaly, (leprous and eczematous,) herpetic, scorbutic, and even psoric eruptions. From larger doses, the cellular tissue may become involved, and ulcers, or even gangrenous patches become developed. (10.)

Arsenic seems to have special relations with the effete matters of the organism. Administered internally, or applied externally, it possesses the power of decomposing and destroying cancerous and other malignant degenerations of the tissues. In producing this effect, its action is almost entirely limited to the diseased parts. So, also, when administered in minute and repeated doses, it excites into activity latent morbid humors in the blood, or effete matters from the metamorphoses of the tissues, which are not eliminated by the pores of the skin. (10.)

Its operation appears to be two-fold; first, by a direct contact of its atoms, in a crude form, with either healthy or diseased parts, and producing actual disorganization and destruction; or, secondly, in very minute doses, acting upon the retained products of the changed tissues of the organism, in obedience to the law of catalysis. Crude or allopathic doses, with their physiological phenomena, may be placed in the first category; while infinitesimal doses, with their pathogenetic results, may be ranked in the latter class. (10.)

ARSENICAL ERUPTIONS.

Boerhaave notices, among other symptoms, *yellowish vesicles* appearing upon the breast, for several days. (73. 46.)

CASE 1.—A man, aged thirty-five, was poisoned with two drachms of Arsenic. On the sixteenth day, an abundant *miliary* eruption made its appearance over the whole body, and two ulcers, which made their appearance upon the heels, discharged an ichorous matter. The eruption, after several exacerbations, disappeared after fifteen days, leaving a *dry, furfuraceous, scaly* surface. (73. 46.)

CASE 2.—Belisle, fifty-seven years of age, apothecary's assistant, powdered, in two days, three hundred weight of Arsenic. The second

day he was seized with various alarming symptoms; the fourth day he had *pimples* on his hands, on his knuckles, and also on his forehead; also, a painful tumefaction of the right arm and hand. His face became covered with *pustules*. (73. 46.)

CASE 3.—A cavalry officer was poisoned with Arsenic in soup. During his convalescence, there appeared upon his face, his neck, and the interior aspect of the fore-arm, an eruption of little *pustules* of a miliary character. (73. 46.)

CASE 4.—Five men were poisoned with an Arsenical solution in wine. In a few days, there appeared a complete want of appetite, followed by an eruption of little *pustules*, resembling the itch. The desquamation was prompt. (73. 46.)

CASE 5.—A chambermaid rubbed her head, for some trivial affection, with a pomade containing Arsenic. In six or seven days, the whole head was swelled, the ears, doubled in volume, were covered with *crusts*. The ninth day, the body was covered with a considerable eruption of little *pimples* with white points, above all the hands and feet. In less than forty-eight hours, the eruption disappeared, followed by desquamation. (73. 46.)

CASE 6.—Eva Truszka and Anna Malkowska powdered their heads, by accident, with Arsenic. The two following days they had violent headache, and enormous swelling of the scalp and of the face. Their hair was cut off. On the 26th, twelve days after the accident, Eva's head and face were enormously tumefied, and spots and bluish streaks covered her face; and there were many ulcers, the size of a penny, upon the hairy scalp. With Anna, there was less tumefaction, and some ulcers upon the head. On the 14th of the succeeding month, the ulcers, which had penetrated to the pericranium, were rapidly healing. (73. 46.)

CASE 7.—Three young men powdered their heads with Arsenic. The same symptoms as above. One of them died. At the autopsy of the latter, there were found large blue-black spots upon the thorax, the abdomen, the scrotum, the hypochondrium and back. The scrotum was inflamed. (73. 46.)

CASE 8.—Kelly, in experimenting with Arsenic in chronic rheumatism, developed an *erysipelas* upon the eyelids and face, lasting six days. (73. 46.)

CASE 9.—Three young women poisoned themselves accidentally with Arsenic, mistaken for candy. The next day there were *purple spots* upon the breast and back of the neck. (73. 46.)

CASE 10.—Bachman gives the history of a lady poisoned with Arsenic by a servant. In the midst of a train of grave symptoms, it was discovered, towards the fifth day, that the anus and genital organs were *gangrenous*. (73. 46.)

CASE 11.—In a young man, who had committed suicide with Arsenic, in fourteen hours there was found, at the autopsy, traces of *gangrene* upon the scrotum and prepuce. (73. 46.)

CASE 12.—A man of forty-five, was induced to apply Arsenic to an

ulcer upon the leg. The day but one after, among other symptoms of Arsenical poisoning, the body was covered with *red spots*. The fifth day, the ecchymoses were almost black. (73. 46.)

CASE 13.—A young woman poisoned herself with Arsenic on the 17th of October. After divers symptoms, on the 19th there appeared a *miliary* eruption, especially upon the abdomen, and *vesicles* upon the tongue, which disappeared at the end of a few days. (73. 46.)

CASE 14.—A man, aged thirty-two, poisoned himself, on the 3d of May, with "Beccœur's Arsenical Soap." On the morning of the 5th, the neck and the breast were covered with a *confluent pruriginous* eruption, something like *urticaria*. The eruption spread, during the day, to the hairy scalp, to the back of the neck and the shoulders, and disappeared during the night. (73. 46.)

CASE 15.—Two young men poisoned themselves with a bottle of wine, containing half an ounce of Arsenic in solution. With both, between the fourth and fifth day, there was *desquamation* of the greater part of the body, most marked upon the fore-arms. (73. 46.)

CASE 16.—In the case of M. Blandy, five days after the appearance of the first symptoms of poisoning, there was a *pustular* eruption about the lips, and the anus was excoriated and surrounded with ulcerations, accompanied with an insupportable burning. (73. 46.)

CASE 17.—Dr. Schindler, whose brother, a chemist, was poisoned by the fumes of arseniuretted hydrogen, notes, among the other symptoms, that in the course of the third week, during his convalescence, the prepuce and glans were covered with *purulent vesicles*, which later became small, round, superficial ulcerations. He counted sixty-five upon the prepuce. The eruption passed off in ten or twelve days. (73. 46.)

CASE 18.—In the case of two little girls, of three and five years, who died, poisoned by Arsenic, it was noticed that there was intense *scarlatinous redness* of the skin of the abdomen, and especially of the internal surface of the thighs. They died, respectively, in twenty-seven and eighty-five hours. (73. 46.)

CASE 19.—In a case mentioned by Orfila, on the fifth day there was remarked upon the forehead, around the eyes, upon the cheek-bones, the upper part of the arms, the shoulders, the upper part of the chest, an eruption of *white pustules*, not very numerous, and which became analogous, as to form and course, to the *small-pox* eruption. The *pustules*, of which some were isolated, the greater part *confluent* and easily broken, were replaced by *scabby crusts*, which fell, leaving very perceptible cicatrices. (73. 46.)

CASE 20.—N., occupied in pulverizing Arsenic, although protected by a cloth (*mouchoir*) over his head and face, still was attacked by the following symptoms: The hairy scalp was covered with a great number of hard and isolated *pustules*. The face and ears were enormously swollen, red, and *erysipelatous*, and covered with *vesicles*, which degenerated rapidly, and took on a gangrenous aspect. He was completely cured at the end of four weeks. (73. 46.)

CASE 21.—A man, aged forty-five, poisoned himself with Arsenic, and died the next day. The scrotum was livid and excoriated. (73. 46.)

CASE 22.—On the 10th of February, 1846, twelve persons were poisoned, at Thaun, with Arsenic. The fourth day, the greater part of them were attacked with an eruption of little *blisters*, similar to those produced by the *nettle*, or little *pimples*, as in miliary affections. (73. 46.)

CASE 23.—On the 13th of May, 1847, J. M. poisoned himself with a coffee-cup of an Arsenical solution. The usual symptoms were rapidly developed. On the 17th, dysphagia, and ulcerations of the throat, increased the next day. On the 19th, in the parotid region of the left side, appeared an *erysipelatous tumor*. On the 20th, it was covered with numberless *vesicles*, full of yellowish serosity, and the tumor extended to the nose and mouth. On the 21st, the tumor was enlarged and covered with fresh vesicles. On the 23d, the erysipelas became crusted over, and desquamation was going on, and five superficial ulcerations had appeared upon the border of the tongue. On the 25th, new vesicles upon the left ear. He slowly recovered. (73. 46.)

CASE 24.—Mrs. Wooler was poisoned, by her husband administering Arsenical injections, about the 1st of May. On the 30th, the mouth and lips were excoriated. On the 8th of June, these excoriations were notably increased, and were very painful. On the 13th, the face and the arms were covered with an eruption, which took, little by little, the character of an *eczema*. On the 23d, the back of the tongue was ulcerated, and the palate covered with papules or *pustules*. (73. 46.)

CASE 25.—Marie Lassalas, sixteen years of age, a domestic, entered the 10th day of October, 1854, at the Hotel Dieu de Clermont. She was young, fresh, and well-looking, offering only slight traces of chlorosis. From the first day of her entrance, she took four-drop doses of Fowler's solution, four times daily. On the 16th, the following symptoms were noted: Slight lacrymation; catarrhal stoppage of the head, with nasal voice; very marked fluent coryza; has had a little bleeding at the nose during the night.

17th.—Catarrhal symptoms very marked, (*fortement enrhumée*); has sneezed all night; the throat and tonsils red.

20th.—There has appeared, during the night, all over the left forearm, a *confluent eruption of little, red, papulous pimples*, of the size of a pin's head. Two days before, according to the patient, the same eruption had appeared and disappeared.

21st.—The same eruption, accompanied with great loss of appetite, and the same "cold in the head," and lacrymation.

22d.—The eruption of the forearm was much more considerable. The intensity of the eruption induced me to suspend the Fowler's solution.

23d.—The forearm is quite red, covered with very small and very confluent papules, similar to what is called "*goose flesh*."

24th.—The same redness of the fore-arm, with considerable painful swelling.

25th.—For some days past, there has been the same eruption about the lips, upon the hand and right knuckle, with intense itching.

These eruptions disappeared, little by little. There followed a slight *desquamation*. The coryza obstinately remained to the last. Discharged on the 4th of November without a trace of the eruption. (73. 46.)

CASE 26.—Desgranges relates the case of a woman who anointed her head with an Arsenical ointment, to kill lice, and, after using it several days, was attacked with *erysipelas* of the head and face, attended with ulceration of the scalp, swelling of the salivary and cervical glands, and inflammation of the eyes. There were, likewise, violent constitutional symptoms, much fever, fainting, giddiness, vomiting and pain in the stomach, tenesmus and ardor urinæ, tremors of the limbs, and even occasional delirium. Afterwards the whole body became covered with an eruption of white papulæ, which dried and dropped off in forty-eight hours. She recovered gradually. (73. 46.)

CASE 27.—A schoolboy, having found in the street a parcel of Arsenic, his mother mistook it for hair powder; and, as he had to deliver a valedictory at school the next day, she advised him to powder his head well with it in the morning, which he accordingly did. In the middle of his speech, he was attacked with acute pain of his face, and a fertile crop of *pustules* soon broke out upon it. The head afterwards swelled much, and the *pustules* spread all around it. He was tormented with intolerable heat in the scalp, and the hair became matted with the discharge into a thick scabby crust. This crust separated in a few weeks, and he soon recovered completely. (73. 46.)

Pathology.—In a similar case to the above, which proved fatal, besides other morbid appearances, the scalp was found gangrenous and infiltrated with blood, and the stomach much inflamed. (73. 46.)

Henckel speaks of miliary eruptions as preceding and disposing to pulmonary phthisis, so frequent among the miners of Freyburg. (73. 46.)

Schepfler, who put forth, during the last century, a treatise upon the hygiene of miners, notices, among other Arsenical symptoms, *vesicles* and ulcerations of the mouth and tongue, ulcerations of the axilla and genital organs, and even *carcinomatous ulcerations* of the latter region. (73. 46.)

Klinge, another physician of the arseniferous mines, affirms that the workmen who constantly handle the ore, rich in Arsenic, are habitually subject to ulcerations of the arm-pits and thighs. (73. 46.)

Brockmann has recently published a work, ("Die Metallurgischen Krankheiten in Oberharze,") which, doubtless, will throw much light on the subject of chronic poisoning. (73. 46.)

Christison says that in Arsenical poisoning, divers eruptions have been remarked, above all, those which last many days in succession; that they are more frequent in those who survive the poisoning a week

or more; that they are of different natures; petechial, morbilliform, (measly) red, miliary, or vesicular. (73. 46.)

Bramer says, that among the workmen employed in the different arts, in using Arsenic, (principally in pulverizing it,) there appears an eruption of vesicles of the size of a pin's head, or even of the size of a pea, similar to the *common itch*. These eruptions are exceedingly itching, and by the action of scratching the pustules, are soon destroyed, and give place to a fine crust. (73. 46.)

The Arsenical eruptions are thus classed:

A. *Petechial eruptions, or ecchymoses*.—They affect, by preference, the trunk and genital organs. (73. 46.)

B. *Papulous eruptions*.—These papules, which some authors have compared to the eruption of measles, often resemble those syphilides so well known, which attack the face. They are often of a hue somewhat less coppery. Their place of election seems to be the neck and face; they have been seen upon the hands. They are, in general, few in number, and discrete. They sometimes arise by groups of red papules, the size of a pin's head; these papules run together, later, to form the large papules the size of a bean. They do not disappear under six or eight days, and fade away successively, with a light furfuracious desquamation. Large, red spots, diffuse and disseminated, have been seen also upon the neck and limbs. (73. 46.)

C. *Nettle rash—Urticarious eruptions*.—This is one of the most frequent forms of Arsenical exanthem. Genyard has often seen patients, under the use of Arsenic, troubled with pimples upon the face, the neck and limbs, soon disappearing. A young girl, whom Genyard treated with the Arseniate of Iron, showed for two consecutive days, throughout the length of both legs and arms, a confluent, *urticarious* eruption. The wheals and pimples were white, slightly rosy, round about, and of the uniform size of beans. They were accompanied with considerable itching. (7. 46.)

D. *Vesicular eruptions*.—These have been compared to the *itch*, white and red miliary eruptions, and of eczema—a form very frequent, and which Genyard himself had frequently seen.

E. *Erysipelatous eruptions*.—The Arsenical erysipelas is often vesicular. It is developed, with equal readiness, by the internal administration of Arsenic. Genyard has lately confined himself to the employment of Arsenic internally, and often sees partial erysipelas of the face, often confined to the eyelids. (7. 46.)

F. *Pustular eruptions*.—These have been compared to those of *small-pox*. They terminate in crusts, or ulceration, and leave "cicatrices." (7. 46.)

G. *Ulcerations*.—These ulcerations have been met with upon the head, limbs, scrotum, tongue, lips, and in the throat; they appear to arise as pustules, which burst, leaving an ulcerated surface. (73. 46.)

H. *Gangrene*.—These last three forms of Arsenical eruptions, appear to be most peculiar to those cases where Arsenic has been administered in toxical doses. (73. 46.)

Arsenic appears to have an elective preference for the genital organs. Stahl has remarked the same fact. "*Deinde accedit ferè in viris specialissima repentina sphacelatio, et post-mortem preceps putrido in genitalibus.*" "Hence, we find a peculiar tendency to sphacelation and putridity of the genitals, particularly after death." (73. 46.)

Clinical Remarks.—Arsenic is very important in many chronic affections of the skin, particularly the *scaly* forms, (lepra psoriasis and pityriasis); also in eczema and impetigo. Ichthyosis and elephantiasis are also said to have been benefited by its use. (3. 54.)

Useful in chronic indurations of the cellular tissue.

Thomas Hunt, of London, has cured with Fowler's solution, several forms of inveterate cutaneous disease, prurigo of the anus, scrotum, and pudendum, lepra, psoriasis, urticaria, impetigo, eczema, acne, sy-cosis, lupus exedens, and nævus maternus—some most obstinate cases yielding to its power. (11.)

He advises full doses, five drops, three times a day, at once, and then that the doses should be diminished—the time for lowering the dose is indicated by the supervention of conjunctivitis, when a prickling sensation is experienced in the tarsi, the eyes suffused with tears, and the conjunctiva inflamed.

The skin of the trunk is apt to take on a slight inflammatory action, and subsequently the skin of the limbs. This inflammation appears as a faint *pityriasis*, and all those parts of the skin, protected from the light, acquire a brownish, dingy, unwashed appearance. If this state be kept up, the other disease of the skin will vanish just as rapidly as if the conjunctiva were kept sore. (11.)

Arsenic is much less apt to affect the stomach and bowels, if taken during a meal.

One patient was cured by one-fourth of a drop of Fowler's solution, three times a day, or only $\frac{1}{160}$ of a grain of White Oxide of Arsenic, of a psoriasis guttata.

In several cases, it acted as a vigorous tonic. (11.)

Todd's inflammatory gastric dyspepsia is apt to be attended with a papular and scaly condition of skin, something between lichen and psoriasis. (11.)

Eczema, in its acute stage, will be infallibly greatly increased in severity by the employment of Arsenic, even in the most minute doses, (Hunt)—but it cures the chronic stage. (11.)

All the diseases of the skin which Arsenic cures, agree in this one important respect, that they are characterized by the presence of *scales* or *scurf*—even when they do not belong to the order squamæ, they are usually but little benefited by Arsenic, until they arrive at that stage in which they assume a furfuraceous or scaly condition. (Hunt 11.)

In the earlier stages of eczema it is injurious, or useless, but when once this disease has fallen into that condition in which there is no longer any distinct evolution of vesicles, but, in their place, a serous fluid, which exudes, at times, and dries rapidly into thin furfuraceous

scales or laminæ, the subjacent skin being red, glazed, dry, and more or less fissured and cracked, it will often be productive of the most decidedly beneficial results. (Hunt. 11.)

Urticaria-tuberosa is the only exanthem which requires Arsenic. (Hunt. 11.)

Lichen is the only papular disease which requires it—in its most chronic and rebellious forms, especially in those varieties of lichen circumscriptus that are confined to the face, or to the margins of the anus and genitals, in which the skin becomes red, excoriated, chapped and furfuraceous. (Hunt. 11.)

Or in chronic fluent form of lichen, where the whole body is covered with papulæ, capped with thin, flimsy scales, having a close resemblance to pityriasis—the irritation and consequent insomnia being most distressing. (Hunt. 11.)

Chronic eczema is the only vesicular eruption which demands its use—seldom yields but to Arsenic. (Hunt. 11.)

No pustular diseases require it, except very chronic and rebellious forms of impetigo. (Hunt. 11.)

It is, however, incontestibly of the greatest service in *lepra*, and inveterate *psoriasis*. After obstinately resisting all other treatment, it will yield, in the course of a few weeks, to Arsenic. (Hunt. 11.)

When it is about to exercise a beneficial influence, it will be observed that increased action appears to take place in the diseased cutis, which becomes irritable, red, and inflamed. The scaly patches then appear to heal up, either from the centre or circumference, according as it is *lepra* or *psoriasis*, and eventually fall off, leaving the skin red, smooth, shining, and covered with a thin epidermic exfoliation. After this, nothing comes off, but a red stain will be left. This will soon disappear, if the remedy be continued, for, until this blotch be entirely and effectually removed, the disease is liable to return. (Hunt. 11.)

In *furunculus*, Dr. Schweich has prescribed Arsenic, with great success, for some time past, and has found the cure very durable. He begins with four drops of Fowler's solution, twice a day. Acne yields to Arsenic with the same readiness. (13. 46.)

In regard to the treatment of skin-diseases by Arsenic, the following are Mr. Hunt's views, and he has probably given more attention to it than any other writer. The author's object, in his work, is not so much to present a general treatise on skin-diseases, as to point out a more promising mode of treatment of those skin-affections which are particularly marked by their intractability. He describes these diseases as, first, not of limited duration, but they may afflict a whole life-time. This excludes, at once, nearly the whole class of the exanthemata. Second, they are not necessarily connected with or symptomatic of other disorders; thus excluding strophulus, aphthæ, phymæ, and syphilitic eruptions. Third, they neither originate in, nor are protracted by local causes. Scabies, porrigo, and certain local forms of psoriasis, pityriasis, prurigo, eczema, and impetigo are thus excluded

Fourth, they are not specially allied to debility. This puts aside pemphigus, pompholix, rupia, and some varieties of purpura and ecthyma. We have thus the subject much narrowed, and the diseases in which Arsenic will probably be most useful, he asserts to be certain varieties of lichen, lepra, psoriasis, impetigo, eczema, ecthyma, chronic urticaria, acne, sycosis, lupus, and rare congenital nairvus. He states that the first inquiry should be as to whether they are of a syphilitic origin, or if a febrile state exists. Its numerous failures in the treatment of cutaneous diseases, he thinks, depends upon five causes: First, in the syphilitic character of the eruptions, Arsenic being given where Mercury is wanted; second, its inflammatory condition, at which period it does no good; third, it is often given on an empty stomach, and the irritation thus induced prevents its continuance; fourth, it is given in too large doses, and at too distant intervals; and fifth, it should be given in *decreasing* doses.

He regards it, when these precautions are observed, as little short of a specific in the skin-diseases mentioned. He also regards it, in small doses, as curative of diarrhœa, and relates cases where obstinate purging ceased, together with an eruption, under its use. In persons very susceptible of its effects, Mr. Hunt states that a remarkably small dose, such as the *fourth of a minim*, will be sufficient to cure the disease for which it is given; and that its curative effects reside in doses too small to be hurtful. An effect of Arsenic, which has also been observed by others, (M. Duvergie for instance, and in the case, reported in the present article, of the Duc de Praslin), he comments upon, viz., the production of a dirty-brown discoloration of the skin. (13. 46).

PATHOLOGY.

Dr. Geoghegan has investigated the morbid anatomy of a series of cases of arsenical poisoning, and gives the following as the result of his observations. The inquiry was chiefly confined to the appearances in the stomach. In the examination of sixteen fatal cases, all (save one, in which the parts were altered by maceration) exhibited either vascular injection, ecchymosis, or coloration, singly or combined. The mucous membrane was engorged in fifteen, the submucous also in five, the peritoneal in two, and the venous plexus of the splenic end in one. The ramiform vascularity he has found confined to the submucous coat. Of the vascular injections which implicate the mucous membrane, the punctiform, or closely stellate, he has found by much the most common, and the striated the *least*. Diffuse redness, which is the alteration he has most frequently met with, Dr. Geoghegan views as the result of translation or imbibition, influencing a previously-formed vascular injection. It may exist either alone or otherwise. Ecchymosis presented itself, either first as blackish, scarcely elevated patches, or streaks of variable size and figure, readily removable by the nail, and, when thus treated, leaving behind them the ordinary appearances of erosion, or, second, *petechial*, florid-red blotches, of small

size and trivial thickness. He does not accede to the view, that either of these is produced by the lodgment of undissolved particles of Arsenic, but considers them to result either from the general stimulation of the mucous surface, (as occurs in the case of fluid poisons), or, as a consequence of the remote action of Arsenic. The local contact and adhesion of the latter sometimes gives rise to great and fungous thickening, confined to the mucous membrane, which, in one instance, was accompanied by a copious effusion of tough, coriaceous fibrin. Erosion of the mucous membrane has been met with by the author, under the form of either circular patches, with undefined edges, and without surrounding coloration or hardening, or of long, sinuous streaks. He considers erosion as the result of the removal of the mucous coat, where occupied by the blackish ecchymoses, in which parts the membrane is much softened, although elsewhere of natural consistence. (13. 46.)

He has never met with true ulceration of the stomach in arsenical poisoning, although he has seen it invade the buccal mucous membrane. Softening of the mucous membrane, he views as pseudo-morbid, as also extensive blackish-brown staining, which resulted, in one case, from the action of the gastric acid on the blood of a violently irritated surface. Attention is drawn to the importance of a careful inspection of the stomachic and intestinal contents, which, in many cases, the author has found to hold important and unexpected relations to the other evidence; and, in one case, afforded means of identifying the body, which could not otherwise have been effected. (13. 46.)

In regard to inspections after variable periods of inhumation, he thinks that care should be taken in coming to conclusions, since chemical changes take place which may completely deceive the eye. He has observed the deposition of *crystalline, gritty, and whitish grains* on and in the mucous surface, which he has found to consist of ammonio-phosphate of Magnesia; and also a white granular substance on the peritoneal coat of the concave surface of the liver, supposed by the inspector to have been Arsenic, deposited by transudation, which proved to be sulphate of lime. (13. 46.)

CASE 1.—In a case of poisoning, where there was much vomiting and diarrhœa, the heart was relaxed, soft and easily torn; in the right cavities, fluid, livid blood, without fibrinous clots; in the left cavities, the same kind of blood, with small clots; in the inferior vena cava, blood of the color of wine-sediment; mucous membrane of the stomach not softened, but covered with much *yellow mucus*; injected, red, brown, or livid appearance of portions of the stomach and bowels; much enlargement of Brunner's glands, especially in the duodenum and about the ileo-colic valve; congestion of bladder, enlargement of liver, and congestion of the nerv. sympath. magn.

CASE 2.—In two cases, besides the ordinary symptoms, there were numerous aphthæ in the mouth; much paralysis of sensation of the hands and feet, and a paroxysm of fever every evening. Besides inflammation of the stomach and bowels, there was considerable *enlarge-*

ment of Peyer's glands, in the lower part of the jejunum, with tendency to ulceration, and a pretty large number of miliary vesicles in the colon.

1st. Dr. Quaglio made four autopsies of cats, poisoned with the arsenite of Potash. In the first, most of the internal organs were sound, with three exceptions. The heart was indurated, hypertrophied, red, and contained a fibrinous clot, though the blood was cherry-red and liquid. The stomach was distended by gas, and immediately in front of the pylorus there was a perfectly circumscribed spot, the size of a penny—brownish red, evidently the commencement of a perforating ulcer; and all around evidences of chronic catarrh of the stomach. The peritoneal coat of the large intestine was here and there injected, and the ileum was much contracted, throughout its length. (73. 46.)

In the bladder was a little greenish-yellow urine, containing a large amount of albumen, fat-globules, and debris of the epithelium of the urinary tubes. Reaction neutral, Urea, Uric-acid, and chloride of Soda notably less. The kidneys, at least double their volume, were greatly congested—above all in the cortical portion, which was brown-red, hard, and augmented in diameter. The surface of the section exuded a red and viscid liquid. The Malpighian bodies were streaked with red, and congested; the glandules were full of blood; the tubes of Bellini filled with fibrinous clots, flecked with sanguineous globules. (Commencement of the second stage of Bright's disease?) (73. 46.)

2d. Left lung healthy; right lung much hepatized throughout its extent, and from its section there flowed a frothy, sanguinolent serum, (serous pneumonia). The quantity of serum in the pericardium was double its normal amount, the left ventricle enlarged and hypertrophic, and the muscular substance pale. The stomach was tumefied, in stripes resembling tape-worms. The liver was discolored, its border fringed, and filled with liquid, dark-colored blood; it was unequally congested, as if from commencing putrefaction, and the gall-bladder filled with fluid, black-green bile. The coils of intestine were adherent to the abdominal parietes by exudations of coagulable lymph; the cæcum, covered by still stronger exudations, formed one mass with the ileum and neighboring mesenteric glands. The mucous membrane of the ileum presented, near the appendix vermiformis, a gangrenous patch. The urine contained cylinders of fibrine, fat-globules, and diminished albumen and urates. The kidneys, though much tumefied and enlarged, are less congested than in the previous case. The capsule was slightly adherent, and the cortical substance yellow and friable; fibrinous exudations poured out with fat-globules from the openings of the canaliculi. The epithelium of these was, in part, altered and filled with fat. (73. 46.)

3d. In this case, for a week past, the cats' eyes had been closed, and, on opening them, there poured out a quantity of thick, yellow pus. The conjunctiva, however, was only injected and softened; neither pustules nor ulcers upon the cornea, nor conjunctiva, but the crystalline

lenses were both hardened and opaque (*troublés*). Heart altered, the left ventricle presenting commencing hypertrophy. Stomach natural. Kidneys enlarged, slightly hardened, but with a surface still smooth and glossy; the pyramids of Malpighi containing many tubes filled with fibrin. (73. 46.)

4th. The exterior of the nose was covered with a viscid, tenacious matter, fetid, as in ozena; the cartilages of the alæ of the nose were ulcerated and perforated. The mucous membrane of the left nostril was, in particular, converted into an ichorous mass. There was no pus upon the cornea of the right eye, but the lens was obscured. The mucous membrane of the larynx was red, and injected upon the right side. In the upper and lower lobes of the left lung were two spots of hepatization, giving exit to a sanguinolent liquid on section. The heart was indurated, and the left ventricle hypertrophied and globulous, from the encroachments of the interventricular parietes upon the right ventricle. The stomach, distended with gas, was covered, in the neighborhood of the pylorus, with a tenacious layer of a shining black substance, resembling India ink. The duodenum, and all the rest of the alimentary canal was contracted and empty. The small intestines were injected upon the exterior, and contained several lumbrici, and the folds of the mucous membrane of the colon were tumefied. In the cæcum was a deposit of ochre-colored pigment, and similar to the fibrinous appearance of an old apoplectic deposit. In the bladder was a little, clear, yellow urine, containing fat-globules, crystals of uric-acid and oxalates, and the debris of epithelium of Bellini's tubules. In the kidneys, of which the capsule was easily detached, showing the same fatty degeneration of the epithelium, and other tubes deprived of their epithelium, the greater part of the canaliculi were enlarged, in such a manner as to form granulations upon the surface of the kidneys. (73. 46.)

The doses, in the cases of these four preceding animals, was one-eighth of a grain of arsenite of Potash daily, for twenty days, then increased to one-fourth of a grain, for eighteen days more. On the 8th of December, these four cats had succumbed. During the administration of the poison, save the greatest indifference to its administration, great thirst, great tendency to lick the lips and the orifice of the urethra, and, before their death great immobility and fixity of look, but little remarkable was observed. (73. 46.)

The morbid appearances produced by Arsenic differ very much, according to the length of time before death supervenes. In the first place, there are some cases in which little or no morbid appearance is to be seen at all. These all belong to the second variety of poisoning, which is characterized by the absence of all local inflammation, and the presence of symptoms indicating an action on the heart, or some other remote organ. In such circumstances, death takes place before sufficient time has elapsed for the development of local inflammation. (9. 46.)

This, however, is not invariable, as many cases are on record in

which, though death took place within two, three and a half, five, six, eight, or nine hours, strongly marked symptoms of gastritis were present.

In the ordinary cases, in which death is delayed until the second day, or later, a considerable variety of diseased appearances have been observed. They are the different changes of structure, arising from inflammation in the alimentary canal, in the organs of the chest, and in the organs of generation, together with certain alterations in the state of the blood, and of the system generally. (9. 46.)

The first set of appearances to be mentioned are those indicating inflammation of the alimentary canal, viz., redness of the throat and gullet, redness of the villous and peritoneal coats of the stomach; blackness of its villous coat, from the extravasation of blood into it; softening of the villous coat; ulceration of that as well as of the other coats; effusion of coagulable lymph on the inner surface of the stomach; extravasation of blood among its contents; finally, redness and ulceration of the duodenum and other parts of the intestinal canal, and more particularly of the rectum. (9. 46.)

Redness of throat and gullet does not appear to be common, at least it is not often reported; but there appears to be reason to suppose that if it were more frequently looked for it would be found. (9. 46.)

Redness of the inner coat of the stomach is a pretty constant effect of Arsenic, when the case is not very rapid; all the varieties of redness, produced by irritant poisons, may be produced by Arsenic. There is nothing, however, in the redness caused by this poison, by which it is to be distinguished from the pseudo-morbid varieties. (9. 46.)

It is singular, that however severe may be the inflammation of the inner membrane of the stomach, inflammatory redness of the peritoneal coat of the stomach is rarely found. Yet inflammatory vascularity does sometimes occur there. A common appearance, when the internal inflammation is well marked, and one often unwarily put down as inflammation of the peritoneum, is turgesence of the external veins—sometimes so great as to make the stomach look livid. (9. 46.)

Blackness of the villous coat, from effusion of altered blood into its texture, is sometimes met with. When its color is brownish-black, or greyish-black, and not merely reddish-black, where the inner membrane is elevated into firm knots or ridges, by the effusion, and the black spots are surrounded by vascularity or other signs of reaction, the appearances strongly indicate violent irritation. I have already said that such appearances are never imitated by a pseudo-morbid phenomenon. (9. 46.)

One of the most remarkable appearances occasionally observed, where the body has been buried at least some weeks before examination, is the presence of bright-yellow patches, of various sizes, which appear as if painted with gamboge, and obviously arise from the oxide of Arsenic diffused throughout the tissues, having been decomposed and converted into sulphuret of Arsenic, by the sulphuretted hydrogen disengaged during the process of putrefaction. Christison has witnessed this appearance in several cases. It is an extremely important

part of the pathological evidence. I doubt whether natural causes can occasion any appearances similar to it. It is the effect of a chemical test, applied to the poison by nature. (9. 46.)

The next appearance is unnatural softness of the villous coat of the stomach. It has certainly been found, after death from Arsenic, unusually soft, brittle, and easily separable with the nail. But the same state occurs so often in dead bodies, unconnected with the occurrence of irritation in the stomach, that it cannot, with any certainty, be assumed as the effect of irritation, when it is found subsequent to such a symptom. So far from softening and brittleness being a necessary effect of the irritation produced by Arsenic, it is a fact that a condition precisely the reverse has also been noticed. In a case in which Christison examined the villous coat—except where it had been disintegrated by ulceration and effused blood—it was strong and firm, and the rugæ were thickened, raised and corrugated, as if seared with a hot iron. Metzger once found the mucous membrane thickened, dense, and the rugæ like thick cords. (9. 46.)

Sometimes the villous, and, more rarely, the outer coats of the stomach are found actually destroyed, and removed in scattered spots and patches. The loss of substance is occasionally owing to the same action which causes brittleness and softening of the villous coat; the action having been, however, so intense as to cause gelatinization. That such is the nature of the process, appears from the breach in the membrane being surrounded by gelatinized tissue, and not by an areola of inflammatory redness. But, in ordinary cases, the loss of substance is owing to a process of ordinary ulceration, as is proved by the little cavities having a notched, irregular shape, and being surrounded by a red areola, and a margin of firm tissue. Destruction of the coats of the stomach by ulceration is not a very common consequence of poisoning with Arsenic, as death frequently takes place before that process can be established. It does not often occur, unless the patient survive two days. Cases have been known in less time however. In many works on medical jurisprudence, it is stated that it may cause complete perforation; but this is exceedingly rare, though it has been known. (9. 46.)

Another species of destruction of the coats of the stomach is gangrene or sloughing. This appearance occurs frequently in the narratives of the older writers, but its existence as one of the effects of Arsenic is problematical. Christison says it has not been witnessed, so far as he knows, by any recent good authority. Those who have mentioned it, have probably been misled by the appearance put on by the black, extravasated patches, when they are accompanied by disintegration of the villous coat, and effusion of clots of black blood on its surface—an appearance which resembles gangrene closely, in everything but fetor. (9. 46.)

Destruction of the coats of the stomach, as produced by Arsenic, has been variously described by authors, under the terms erosion, corrosion, dissolution, and ulceration. But the correct mode of describing

Arsenicum-Album.

it appears to me to be by the terms gelatinization, or ulceration, according to the nature of the diseased action by which it is induced. At all events it is necessary to beware of being misled by the terms erosion, corrosion and the like, which all convey the idea of chemical action, whilst it is well ascertained that a chemical action either does not exist between Arsenic and the animal tissues; or, if it has existence, it tends to harden and condense, rather than to dissolve or corrode them. *Arsenic is not a corrosive.* (9. 46.)

Various secretions have been found on the inner surface of the stomach. The mucous secretion of the inner membrane is generally increased in quantity. Frequently, it is thin, but viscid, as in its natural state, but sometimes it is both abundant and solid, as if coagulated; and then it forms either a uniform attached pellicle, or loose shreds floating among the contents. In both forms it has been mistaken for the mucous membrane itself. I believe this increased secretion and preternatural firmness of the gastric mucus cannot take place without some irritating agent being applied to the stomach. Both may occur without any other sign of inflammation of the mucous membrane. Mucus, abundant in the stomach, has been known to put on the appearance of curdled milk, owing to the presence of the very large quantity of finely-powdered Arsenic. Sometimes the matter effused is true coagulable lymph; this, of course, is quite decisive of the presence of inflammation. (9. 46.)

Another very common appearance is the presence of a sanguinolent fluid, or even actual blood in the cavity of the stomach. The fluids which are generally the subject of analysis, are thick, dirty, brownish-red, evidently containing a large proportion of blood; actual clots have been found, and, it is said, even half a pound of coagulated blood, in one case; and, in another case, three pounds of black ichor, mixed with clots of blood. A good deal of reliance has been placed on the presence of bloody effusion, in proof of the administration of Arsenic or of some other irritant. It is of some importance, as it appears *not* to be an effect of that irritation which accompanies cholera. (9. 46.)

Redness of the mucous membrane of the intestines is often present, when the stomach is much inflamed. Dissolution of the mucous coat is much less frequent than in the stomach. Ulceration occasionally occurs in lingering cases. The signs of inflammation are seldom distinct lower down in the small intestines than the extremity of the duodenum. But the rectum is sometimes much inflamed, though the colon, and, more particularly, the small intestines, are not. Dr. Male found the rectum abraded, ulcerated and even redder than the stomach itself, and Dr. Baillie also notices two cases in which the lower end of the rectum was ulcerated. A common appearance in lingering cases is excoriation of the anus and even gangrene. (9. 46.)

Contraction of the colon is also mentioned.

In the cavity of the chest will be met with, redness of the pleura, redness and congestion of the lungs, redness of the inner surface of the heart, and redness of the lining membrane of the windpipe. (9. 46.)

Redness of the diaphragmatic part of the pleura, or even of the whole of that membrane, has been at times observed—as one would, indeed, expect, from the pectoral symptoms which at times prevail, during life. Inflammation of the lungs themselves has also been noticed. Dr. Campbell found great congestion of blood, in the lungs of animals poisoned by the application of Arsenic outwardly. Sproegel likewise found the pleura, pericardium, and whole lungs inflamed, in animals. A distinct example of advanced pneumonia is related in *Pyl's Magazine*: The lungs were found in the highest state of inflammation, and so congested as to resemble a lump of clotted blood. Another case is related in *Hencke's Journal*: This patient had obvious pneumonic symptoms during life, and, after death, the lungs were so gorged that, on cutting into them, nothing but clotted blood could be seen in their cellular structure. In a case where it was applied outwardly, for scirrhus, both lungs were found completely gorged with blood, and presenting all the characters of pulmonary apoplexy. (9. 46.)

It is alleged that the inner surface of the heart has been found red from inflammation. In a case examined officially, by Orfila, the left cavities were of a mottled red appearance, and in the left ventricle were seen many small crimson specks, which penetrated into the muscular part of the parietes. The right cavities had a deep reddish-black tint, and the ventricle of that side contained specks like the other, but more faint. These observations are not satisfactory; there is no evidence that the observer drew the distinction between inflammation and the dyeing of the membrane with blood after death. (9. 46.)

The inner membrane of the windpipe is said to be sometimes affected with inflammatory redness. Jaeger found it so in animals, and the symptoms referable to the windpipe during life would lead us to expect the same thing in man.

The organs of generation are occasionally affected. The penis, in the male, and the labia, in the female, have been found distended and black. In an interesting paper by Bachmann, the external (female) parts of generation were surrounded by gangrene; and in a case related in "*Pyl's Collection*," the inside of the uterus and fallopian tubes was inflamed. It is probable that signs of inflammation in the internal organs of generation will be found, if there have been corresponding symptoms during life. (9. 46.)

To complete this account of the morbid appearances of the mucous membranes, it may be that the conjunctiva of the eyes frequently presents vascularity and spots of extravasation. (9. 46.)

With regard to the state of the blood, Sir B. Brodie states that in animals it is commonly liquid. Harles, on the authority of Wepfer, Sproegel, and Jaeger, states that it is black, semi-gelatinous, and sometimes pultaceous. Novati alleges that the blood, after death, is, without exception, black and liquid, as after cholera; of a blackish-purple tint, that colors linen reddish brown; viscid, opaque, and without any trace of coagulation. In a fatal case, related by Wildberg,

the blood was everywhere fluid. This condition is not uniform, for Dr. Campbell found it coagulated in the heart of a rabbit, and Wepfer in a dog. (9. 46.)

GENERAL REMARKS.

It is now generally admitted that Arsenic produces, in the living body, two classes of phenomena, or that, like the narcotico-acrids, it has a two-fold action. One action is purely irritant, by virtue of which it induces inflammation in the alimentary canal and elsewhere. The other, although it seldom occasions symptoms of narcotism, properly so-called, yet obviously consists in a disorder of parts or organs remote from the seat of its application. (9. 46.)

It is also the general opinion of toxicologists that Arsenic occasions death more frequently through means of its remote effects than in consequence of the local inflammation it excites. In some cases, indeed, no symptoms of inflammation occur at all; and in many, although inflammation is obviously produced, death takes place long before it has had time to cause material organic injury. Nevertheless, in some, though certainly in comparatively few instances, the local action, it must be admitted, predominates so much that the morbid changes of the parts primarily acted on are alone adequate to account for death. (9. 46.)

Its chief action being on organs remote from the part to which it is supplied, a natural object of inquiry is, whether this action results from the poison entering the blood, and so passing to the remote organs acted on, or simply arises from the organ remotely affected, sympathizing, through the medium of the nerves, with the impression made on the organ which is affected primarily. On this question precise experiments are still wanted. The general opinion has for some time been that it acts through the blood; and this view has of late been strengthened by indisputable evidence, that the poison does enter the blood, and is diffused by it throughout the body. For a long period, chemists sought in vain for Arsenic in tissues and secretions remote from the alimentary canal; but this most important discovery, pregnant alike with interesting physiological deductions and valuable medico-legal applications, was announced by Orfila to the Paris Academy of Medicine, in January, 1839, when he stated that Arsenic is absorbed in such quantities, in cases of poisoning, as to admit of being discovered, by an improved process of analysis, in various parts of the system, such as the liver, spleen, kidneys, muscles, blood, and urine. The situations where Arsenic is met with in largest quantity are *the liver, the spleen, and the urine*, but above all in *the liver*. The precise circumstances in which it may be found, in one or another of these quarters, has not yet been determined. But, in most cases of acute arsenical poisoning, where the search has been made at all, it has proved successful in the liver. In two late instances, Pereira has succeeded in finding Arsenic in the liver, after four months interment, by Reinsch's or Marsh's test. Since Arsenic, then, is clearly

absorbed into the blood, it becomes an interesting question whether the organization of the blood is thereby changed. This question cannot be answered with confidence. But, in all probability, the blood undergoes some change in its *crasis*; for, in most cases of acute poisoning, that fluid is found, after death, in a *remarkable state of fluidity*. And Mr. James observed, that if venous or arterial blood be received into a solution of Arsenic, instead of coagulating in the usual way, a viscous jelly first forms, and lumpy clots separate afterwards. (9. 46.)

On page 598 of the *Materia Medica*, I stated that Arsenic had occasionally been detected in human bones, in the form of Arseniate of Lime. And, notwithstanding the pretended trials of Lehmann and others, it has again been detected by Professor Doremus in the bones of Mrs. Simpson, who was supposed to have been poisoned by her husband. See Prof. Doremus' elaborate report. (10.)

Our knowledge of the affections produced by the remote action of Arsenic is in some respects vague. Toxicologists have, for the most part, been satisfied with calling it a disorder of the general nervous system. When employed to designate the state of collapse, which accompanies or forms the chief feature of acute cases of arsenical poisoning, this term is misapplied. The whole train of symptoms is not that of a general nervous disorder, but simply of depressed action of the heart. That this is the chief organ remotely acted on, in such cases, appears probable from certain physiological experiments, in which it has been remarked that immediately after rapid death from Arsenic, the irritability of the heart was exhausted, or nearly so, while that of the intestines, gullet, and voluntary muscles continued as usual. (9. 46.)

Arsenic belongs to those poisons which act with nearly or quite the same energy, whatever be the organ or texture to which they are supplied. Experiments leave no doubt that when applied to a fresh wound it acts with at least equal rapidity as when swallowed. Although, in such circumstances, the signs of irritation are often distinct, yet the symptoms, on the other hand, are sometimes more purely narcotic than by any other mode of administering it; Sir B. Brodie, in particular, having observed loss of sense and motion to be induced, along with occasional convulsions. Arsenic likewise acts with energy when applied to the conjunctiva of the eye, as was proved by Dr. Campbell. It acts, too, with great energy when inhaled into the lungs, or in the form of arseniuretted hydrogen. It further acts with violence through the mucous membrane of the vagina, producing local inflammation, and the usual constitutional collapse; also when injected into the rectum and when applied to ulcers. Its power of acting through the sound skin is limited; if applied for a sufficiently long period for absorption to take place, poisoning ensues. It is most active when injected into a vein, or applied to a fresh wound, or introduced into the cavity of the peritoneum; it is quite inert when applied directly to the nerves. (9. 46.)

It is a striking fact that, no matter what the tissue be to which the poison be applied, if death is delayed, *it almost always produces in-*

flammation of the stomach; and, on inspection of it after death, traces of inflammation are found. In some instances of death by its outward application, the inflammation has been greater than where it has been swallowed. Sproegel says, in a dog killed by its application to wounds, the whole stomach and intestines, outwardly and inwardly, were of a deep red color, blood was extravasated between the membranes, and clots found in the stomach. (9. 46.)

Of the different preparations of Arsenic, those which are the most soluble are the most active. The metal itself is inert, in accordance with what appears to be a general law in toxicology. This statement, however, must be qualified in so far as this, that if the metal be given in a coarsely-powdered or pulverized state, a sufficient amount almost always becomes oxidized to give rise to symptoms of poisoning. The most active preparations are probably the arseniuretted hydrogen, the black oxide, or fly-powder, and the white oxide. (9. 46.)

The white oxide, however, is the most important, as with this we have most often to deal, and it is the power of this which it is desirable to fix with some degree of precision. (9. 46.)

It has been stated, by various systematic authors, that the white oxide will prove fatal to man in the dose of two grains. Hahnemann, according to Christison, says, in more special terms, that in circumstances favorable to its action, four grains may cause death in twenty-four hours, and one or two grains in a few days. But neither he nor any of the other authors alluded to have mentioned actual cases. Foderè knew half a grain to cause colic and dysenteric flux, which continued obstinately for eight days; and Christison has related an instance where six persons, after taking each a grain in wine, during dinner, were seriously and violently affected for twelve hours. Mr. Alfred Taylor mentions three similar cases, occasioned by taking Arsenic in port wine—one, an infant about sixteen months old, who got about one-third of a grain, a lady, who took a grain and a-half, and a gentleman, who got two grains and a-half—in all of which, violent vomiting and prostration, without pain, occurred for three or four hours, and the gentleman of the party did not recover for several days. M. Lachese mentions his having met with a number of cases of poisoning from small doses in bread or soup, whence he concludes that even one-eighth of a grain, taken in food, may cause vomiting; that a quarter, or twice as much, taken once only, causes vomiting, colic and prostration; that the same quantity, repeated the next day, renews these symptoms in such force as to render the individual unfit for work for several days, and that four such doses, taken at intervals during two days, that is between one and one-half and two grains in all, excite acute gastro-enteritis, and may prove fatal, since two individuals who had taken this much died—one in seven weeks, and the other three weeks later. The smallest fatal dose I (Christison) have found recorded elsewhere, is four grains and a half, and death ensued in six hours only; but the subject was a child four years old, and the poison was taken in solution. Alberti mentions the case of a man who died from

taking six grains. Two children died, the one in two days, the other a day later, after taking rather less than sixteen grains; their ages were four and a half and seven. Valentine alludes to a case where thirty grains of the oxide, in powder, killed an adult in six days. The effects of even small medicinal doses, and the fatal effects of comparatively small doses on animals (Renault having found that a single grain in solution killed a large dog in four hours) must convince every one that the general statement of Hahnemann cannot be very wide of the truth. (9. 46.)

The activity of oxide of Arsenic is impaired by admixture with other insoluble powders. Bertrand, under the impression that charcoal was a complete antidote, took five grains of Arsenic mixed with that substance, with impunity; but Orfila afterwards showed that other insoluble powders had the same effect, as clay, &c., and act simply by enveloping the poison, and therefore must be introduced along with it. A singular recovery from a dose of sixty grains, mixed with powdered Cinchona-bark, probably arose from this circumstance. In this case, however, the symptoms were severe for three days. (9. 46.)

Dr. Geoghegan regards the influence of Arsenic on the process of decomposition, to be rather of a catalytic or disposing nature than due to chemical action. In the course of his researches, he has found an organ comparatively well preserved, from the tissue of which the poison has been completely discharged, while in another organ of the same individual, in a less complete state of preservation, it was readily detected; it thus looking as if the retention of the Arsenic in the tissue favored its more rapid decomposition. As to its entering into complete chemical union, as a general thing, he doubts; but he is convinced that it does so combine with the structure of the liver. But he assigns various reasons which lead him to reject the hypothesis of Liebig, that it is by this chemical reunion that Arsenic is enabled to act as a poison; on the contrary, he thinks that it would favor its allocation in situations where it is least productive of disturbance to the system at large, and most favorable to its elimination from the blood. (13. 46.)

He has witnessed, on the one hand, preservation of the stomach and intestines, the body decaying as usual, and, in others precisely the opposite conditions. In the latter case, he has found that the rapidity of decomposition is not equal throughout the alimentary tract. He describes a peculiar form of decay of the alimentary canal, which he calls *rancid* putrefaction. It is characterized by a peculiar odor, like that of fatty matter altered by exposure to the air, and by a persistent and strongly-marked acid reaction, which, in one instance, continued undiminished after the lapse of four years. (13. 46.)

In some instances, during the slow decay of the partially dried organs of persons poisoned by Arsenic, the alliacious odor was distinctly perceptible. It was singular that such organs, kept in closed vessels, were greedily attacked by small insects, which maintained a vigorous existence, although, moreover, immersed in an atmosphere impregnated with arseniuretted hydrogen, perhaps with the exception of the cyanide of cacodyl, the deadliest of the arsenical compounds. (13. 46.)

The most common effects from long-continued smaller doses, like one-sixteenth to one-sixth of a grain, are, a gradual sinking of the vital powers, general feeling of *malaise*, disordered stomach, loss of appetite, tongue dry and furred, thirst or adypsia, nausea, vomiting, purging, pain in the stomach and bowels, heat, flatulence and distention of the stomach and bowels, constriction of the mouth and throat, with dryness or with salivation; tenderness of the mouth; pulse frequent, feeble, and sometimes irregular; breathing short and oppressed; faintness, debility, headache, vertigo, sleeplessness, inflammation of the conjunctiva, swelling and stiffness of the palpebræ and face, heat, swelling and itching of the tarsi, numbness, irritation of the skin, dropsical swellings of the face and limbs, general wasting of flesh. (10.)

When taken in doses of from a twentieth to a sixteenth of a grain, it is said to increase the appetite, and to act as an alterative and a general tonic. If swallowed, or applied to a denuded surface, it is absorbed into the system, and may be detected in the blood, the bones, the urine, the liver, kidneys, spleen, stomach, and the muscles.

Waring quotes the following synopsis of twenty-five cases, from Dr. Guy's "Principles of Forensic Med.," p. 466: "*Vomiting* in twenty-three; in one not until artificially induced; in one or two it has been absent. *The vomited matters* consisted, in three cases, of blood; in one, of mucus only; in one, of water containing Arsenic; in one, of bile; and in one, of bile and fæces. *Diarrhœa* was present in eleven, excessive in seven, absent in four. *The matters passed by stool* consisted, in three cases, of blood; and in two, of matter resembling green paint. *Pain* present in nineteen, absent in one; in two, it subsided after a short time. *The tongue and throat* constricted, hot, painful and tense in nine cases. *Thirst*—of seventeen cases, it was present in fifteen, absent in two; and in thirteen it is described as intense. *Countenance* flushed and swollen in seven cases, and pale and anxious in five. *Eyes* inflamed, swollen, or smarting, in seven cases. *Skin* hot and dry in six cases; covered with cold perspiration in four; profuse perspiration, with petechiæ, in three; universal desquamation in one; eczematous eruption in one. *Headache* in nine cases, absent in one; described as intense in four. *Pulse* generally very frequent, but variable, ranging from 90 to 140, or more; in one from 30 to 49. *Violent palpitations* in two. *Extreme restlessness* in five. *Extreme debility* in ten. *Coma* in three, and *delirium* in three. *Mind unimpaired* in six. *Cramps of the legs* in nine cases; in four, extending to the arms. *Convulsions* in six. *Paralysis of the tongue and gullet* in three. *Tetanus* in two. *Chorea* in one. *Hysteria* in one. *Epilepsy* in two. *Death* took place in three cases, in the midst of convulsions; and, in one, after a horrid fit of convulsive laughter, followed by a rigid spasm of the whole body."

Some cases, like number five, for example, afford us examples of its action upon the brain and nervous system. Although vomiting, purging, intense thirst, and arterial excitement were present in each of these cases, yet there was an almost entire absence of pain, abdomi-

nal tenderness on pressure, and other indications of local inflammation, and most of the symptoms were referable to the brain and nervous system, especially those which occurred near the close of life. (10.)

Hahnemann, in his first essay on the homœopathic principle, asserts, "that it has a great tendency to excite that spasm in the blood-vessels, and the shock in the nervous system, called febrile rigor. If it be given in a pretty large dose (one-sixth or one-fifth of a grain) to an adult, this rigor becomes very evident. This tendency makes it a powerful remedy as a similarly acting medicine in intermittent fever; and this all the more, as it possesses the power, observed by me, of exciting a daily-recurring, although always weaker paroxysm, even although its use be discontinued. In typical diseases of all kinds, (in periodical headache, &c.,) this type-exciting property of Arsenic in small doses (one-tenth to, at most, one-sixth of a grain in solution) becomes valuable, and will, I venture to guess, become invaluable to our perhaps bolder, more observant, and more cautious posterity. * *

* * The continued use of Arsenic, in large doses, causes gradually an almost constant *febrile state*; it will thus, as indeed experience has to a certain extent taught us, prove useful in hectic and remittent fevers, as a similarly acting remedy, in small doses, (about one-twelfth of a grain)."

"It possesses a great disposition to diminish the vital heat and the tone of the muscular fibre. Hence paralysis, from a strong dose, or a long-continued and incautious employment of it."

"It diminishes the tone of the muscular fibre, by diminishing the tone and cohesion of the coagulable lymph of the blood, as I have convinced myself by drawing blood from persons suffering from the effects of Arsenic, more especially such as had a too inspissated blood before the use of this metallic acid."

"It also diminishes the sensibility of the nerves. Thus, it generally seems to kill more by extinguishing the vital power and sensibility, than by its corrosive and inflammatory power, which is only local and circumscribed."

"It weakens the absorbent system."

"I would direct particular attention to its peculiar power of increasing the irritability of the fibre, especially of the system of the vital functions. Hence cough, and hence the above-mentioned febrile actions."

"When used for a length of time, and in pretty large doses, it seldom fails to cause some chronic cutaneous disease, (at least, desquamation of the skin)."

"It produces acute, continued pains in the joints, as I have seen."

The following remarks were compiled many years ago, from authorities now not recollected: (11.)

The earliest *poisonous* (!) effects are, diminished (?) action of heart and intense inflammation of stomach. Given *medicinally* ! the first and earliest sign of its action, is an increased strength and frequency of the pulse; next follows the well-known fullness of the palpebræ, and

itching of the *alæ nasi*. If its use be continued, the irritation of the mucous membranes extends to the fauces, inducing redness and cough, and along with these symptoms the tongue begins to be covered with a white fur, which, gradually increasing in thickness, gives its surface the appearance of having been rubbed over with chalk; the action of the heart continues to increase in force and frequency—the pulse becomes full and hard, and, at last, a general *anasarcous* state is set up.

Again, the symptoms induced by an overdose are of an inflammatory or pyretic character. Bouillaud says it acts poisonously on the system in two different ways :

1st. By exerting a specific influence on the blood, thus giving rise to *adynamia*.

2d. By exciting an inflamed or sthenic condition in the parts to which it is applied.

Emery says, whenever unpleasant symptoms arise from doses of one-fourth of a grain, they are always of a more or less inflammatory character; such as a quickened and strong pulse, sharp pains in the region of the heart, and general feverish heat. Along with these symptoms, he has occasionally observed a partial paralysis of the *extensor* muscles of the hand. The prostration of the nervous and circulating systems are often fatally great, coupled with severe structural disorganization of the stomach and bowels. (11.)

Brodie, in his experiments, always found the action of the heart excessively feeble, although the muscular parts, including the intestines, nearly retained their usual irritability; hence it would seem to exert a specific paralyzing power upon the heart. It seems also to have almost a specific tendency to irritate and inflame the gastric surfaces, as appears from the fact, in several cases of fatal poisoning from its external application, that the mucous membrane of the stomach and bowels has, on dissection, been found highly inflamed. (11.)

Jaeger compares the action of Arsenic to that of the poison of snakes, which acts primarily upon the blood. Sproegel sprinkled it upon a wound in a dog's back, and he found that the stomach and bowels became inflamed. Coagulated blood was effused into the cavities of the stomach and bowels. The pleura, pericardium, and lungs were also very much inflamed. (46.)

Lachaise of Angers, says that one-eighth of a grain has no other effect than that of inducing speedy vomiting. One-fourth to one-half of a grain produces more decided symptoms—stomach seriously affected, also the bowels. Hence there was pain in the abdomen, nausea, vomiting, with acrid sensation in the throat. Repetition of the dose, same symptoms, with vertigo and great prostration of strength. (46.)

A. S. Taylor gave one-third of a grain to a child of sixteen months. In about twenty minutes, it became sick and vomited severely for three hours, and thus recovered. It did not complain of pain. (46.)

A lady at fifty-two, took one-half of a grain. In thirty to forty minutes, complained of general uneasiness. She had no pain, but vomited violently for four hours. She then recovered.

A gentleman, aged forty, took two and one-half grains. In twenty minutes, felt unwell, and vomited for three hours. He did not recover entirely for several days.

In these four cases there was no pain, but violent vomiting and prostration of strength. A full stomach probably saved them all. (46.)

CHARACTERISTIC PECULIARITIES.

Arsenic exhausts the powers of life, either of single organs, or of the whole organism. It produces decomposition of the organic substance, a cachectic condition, colliquation, which the following symptoms clearly show: Yellow, pale, death-like color of the face, sunken eyes, hæmorrhage, *per rectum*, &c.; foul, destructive, easily bleeding, cancerous ulcers; eruptions, like scorbutis; black pustules; emaciation; dropsy; phthisis, &c. Among the pains produced by Arsenic, *burning pain* is the most characteristic and constant, although there are other remedies, such as Carbo-anim. and vegetabilis, Euphorbium, Mezereum, Pulsatilla, Secale-cornutum, &c., which produce this kind of pain, but none in such a marked degree as Arsenic. A very characteristic effect of Arsenic is the *periodicity* of its physiological phenomena, although there are other remedial agents, such as China, Ipecac., Natrum-mur., Nux-vom., Pulsatilla, Rhus-tox., Veratrum, which possess this intermittent character. All morbid conditions produced by Arsenic are characterized by extreme restlessness, uneasiness, and almost causing frenzy in some instances. Arsenic-pain is relieved, although only temporarily, by the application of external heat. The Arsenic-pain appears mostly during rest, and is generally relieved on motion. *Roaring* in the ears, during a paroxysm of pain, as in China, is a characteristic symptom of Arsenic. Arsenic-nausea and vomiting is accompanied by extreme prostration and anguish, periodical, and worse during rest. The cardiac symptoms point strongly to Arsenic, as a remedy or palliative in morbid conditions of the heart, also its specific action on the external skin is very strongly marked. (26.)

GENERAL SPHERE OF ACTION.

EMPIRICAL OPINIONS.

Alterative, febrifuge, anti-periodic, tonic, anti-spasmodic.

Arsenious-acid appears to exert a SPECIFIC influence on several parts of the body, especially the alimentary canal, the heart, and the nervous system. That the *alimentary canal* is *specifically* affected, is shown by the *inflammation* of the *stomach*, produced by the application of Arsenic to wounds, and which, according to Sir B. Brodie, is more violent and more immediate than when this poison is taken into the stomach itself. That the *heart* is also *specifically* acted on by Arsenious-acid, is proved by the symptoms, (the *anxiety* at the *precordia*, the *quick, irregular pulse*, &c.,) and by the post-mortem appearances, (*red spots* in the substance of this viscus,) and by the diminished sus-

ceptibility to the galvanic influence. The specific affection of the *nervous system*, is inferred from the symptoms; namely, the headache, giddiness, wandering pains, impaired sensibility of the extremities, delirium, coma, feebleness, lassitude, trembling of the limbs, and the paralysis, or tetanic symptoms. (54.)

The alimentary canal, heart, and nervous system are not the only parts on which this acid appears to exert a specific influence; the lungs, the skin, the salivary glands, &c., are also specifically affected. The disorder of the lungs is inferred from the local pain, cough, and occasional inflammatory appearances after death. The eruptions and other altered appearances of the skin, and the falling off of the hair and nails, sometimes noticed, have led to the idea of the specific influence of Arsenious-acid on the cutaneous system; an opinion which seems further supported by the fact of the remarkable influence it exercises in some cutaneous diseases, especially lepra. The salivation noticed by Marcus, Ferriar, McFarley, Cazenave, and others, shows that the salivary glands are specifically influenced. The swelling of the face, and the irritation and redness of the eye-lids also deserve notice, in connection with the specific effects of this poison. (3. 54.)

PHYSIOLOGICAL EFFECTS.

On Vegetables.—The effects of Arsenious-acid on plants, have been studied by Jaeger, Marcet, Macaire, and by others, and, from their observations, we learn that it is poisonous to all the higher, and most of the lower families of plants. It appears that seeds which have been soaked in a solution of Arsenious-acid are incapable of germinating, and that buds which have been plunged in it are no longer capable of expanding. If roots or stems be immersed in this solution, the plants perish—death being preceded by drooping of the leaves and petals, and the appearance of brownish patches on the leaves, the veins and midribs of which are discolored. If the stem of the common Barberry (*Berberis-Vulgaris*) be placed in a solution of Arsenious-acid, the plant dies; but the stamens, according to Macaire, become stiff, hard, and retracted, and, on any attempts being made to alter their position, they readily break. On repeating the experiment, however, I did not observe this condition of the stamens; I found them not at all brittle, but quite flexible, and difficult to break by the point of a knife. The leaves, when burnt, evolved a garlic odor. (3. 54.)

Jaeger also found that Arsenic is absorbed by plants; for, on burning vegetables destroyed by this poison, he experienced an alliaceous odor. On some cryptogamic plants, Arsenious-acid appears to have no injurious influence. Jaeger has seen a small plant (supposed by De Candolle to be *Mucor-imperceptibilis*) growing in water, which contained $\frac{1}{32}$ of its weight of Arsenic. More recently, Gilgenbrants says he has seen an algaceous plant, of the genus either *Leptomitus* or *Hygrocrocis*, develop itself in a solution of Arsenic. Dr. Pereira confirms this statement, and states that, at the time of writing, he has before him an abundant vegetation (*Hygrocrocis*) in a solution of Ar-

senious-acid, the vegetable filaments being intermixed with octohedral crystals of Arsenic. (54.)

On Animals generally.—Arsenious-acid is poisonous to all classes of animals. Dr. Pereira thinks there are no exceptions to this statement known. The most extensive series of experiments are those performed by Jaeger. From them we learn that in all animals, from the infusoria up to man, death from Arsenic is invariably preceded by INORDINATE actions, and INCREASED EVACUATIONS, especially from the mucous membranes. In most animals, the stools were frequent and fluid, and in those in which mucus is secreted on the surface, it was remarkably increased. The power of voluntary motion and susceptibility of external stimuli were decreased, and, after death, the muscles soon ceased to be influenced by the galvanic agency. In animals which breathe by lungs, respiration became difficult and laborious; and in warm-blooded animals, great thirst was experienced. In birds and mammals, convulsions came on, preceded by vomiting, except in those animals (as rabbits) which cannot vomit. Enormous quantities of Arsenious-acid have been sometimes administered to horses with impunity. Berthe gave two, and afterwards three drachms to a mare, for the cure of an obstinate skin disease, without any injurious effects. Beissenhirts gave successively, on different days, one, four, three, two, and eight drachms of Arsenious-acid to a horse; the animal did not die until the ninth day after taking the last mentioned dose. Yet, notwithstanding these and some other analogous facts, which seem to prove that Arsenic has comparatively little effect on horses, the best informed veterinarians agree in considering it an energetic poison to those animals. (3. 54.)

In Mr. Hunt's inquiry into the properties of Arsenic, addressed to some two thousand practitioners, their conjoined testimony went to show that its action varies more than that of any other mineral; this has been noticed in poisonous as well as in medicinal doses. Second, that its powers are chiefly manifested in chronic, non-contagious skin-diseases; next to these come intermittent and neuralgic maladies. Third, that, in many cases, Quinine increases its efficacy. Fourth, that Arsenic should not be given when another medicine will answer the purpose, and that a passive state of the system is preferable for its administration. (13. 46.)

Girdlestone says Arsenic should never be given in doses of more than five or six drops, three times a day, to adults; two or three drops, one or two times a day, to children. (11.)

Other authorities, viz., Bateman, Thompson, Rayer, Biett, never give more than fifteen or eighteen drops a day. (11.)

When given in medicinal doses, one of the earliest constitutional symptoms is acceleration of the heart's action—sometimes it becomes quickened, in the course of a few days, by ten, twenty, or even thirty beats more in a minute; pulse, at the same time, hard and wiry. In some cases, before, but generally after the increase of pulse, signs of irritation of the stomach arise; the tongue becomes coated, toward its centre and

root, with red sides and tip; loss of appetite, sense of weight in the epigastrium; at the same time, heaviness and pricking sensations about the eye-lids, with flashes of light before the eyes when they are closed; after a time, the eyelids will become puffed and droop, giving the countenance a peculiarly melancholic and care-worn appearance. More or less headache, chiefly over the eye-brows and lower part of the forehead; this pain in the head is frequently one of the first symptoms; the patient commonly has confused and horrible dreams, especially the case with children. (11.)

Girdlestone has remarked that, in some cases, a uniform lobster-red color of the skin came on, (hence homœopathic to scarlet fever); that erysipelas sets in, or that phlyctenæ and pustules appear when Arsenic disagrees. (11.)

Erichsen has frequently observed the disease of the skin for which it was given, more particularly chronic eczema, evince a decided increased action—the patches becoming red and irritable; if its use then be continued, which it should never be, great irritation of the stomach and throat will ensue; there will be nausea, vomiting, total loss of appetite; headache, which increases in severity; urine becomes high colored; the countenance, which has become pale and sallow, will assume a remarkably sorrowful and anxious cast; tremors of the limbs come on, with an occasional feeling of faintness. Sometimes the first symptom is a degree of thirst, feeling of oppression about the epigastrium; in others, pricking sensations about eye-lids, and flashes of light; in others, and very commonly headache, with disturbed dreams. Quickness of the pulse is usually antecedent, or at least coincident to all those. (11.)

In a nervous female, who took it in excess, it caused extensive derangement of the stomach, which was followed by a violent neuralgic attack; at a subsequent period, a distressing train of hysterical symptoms set in, which terminated in dementia, which has lasted four years. (11.)

Arsenic is badly borne by plethoric persons, or those of a highly sanguine, or sanguineo-nervous temperament. In persons of a ruddy complexion, blue eyes, light or fine hair, thin, delicate skins, excitable pulse and nerves, whose hearts beat and cheeks flush from slight emotions, it quickly irritates the digestive organs, and causes a sense of weight or tension in forehead. (11.)

ON THE VASCULAR SYSTEM.

Blood.—Hahnemann asserts that it diminishes the proportion and cohesion of the coagulable lymph in the blood, and thus diminishes the tone of the muscular fibre. He also supposes that it has a tendency to excite spasms of the blood-vessels. (10.)

It is often found in the blood, and probably exercises a direct influence in decomposing it, and holding it in a fluid state. The blood of persons who have been poisoned with Arsenic is said to resemble that of patients who have died of yellow fever, cholera, and certain typhoid maladies. All the blood-vessels are found to contain blood, in a fluid, black, and sometimes papescient condition. The cavi-

ties of the heart are also found to contain more or less thick, black, decomposed blood. (10.)

Heart and Arteries.—Spasm of the blood-vessels, according to Hahne-mann, is an effect of Arsenic. This effect is produced by the direct action of the poison upon the arterial vessels, and the influence is depressing from the commencement, as is evident from the rapid, feeble, and irregular pulsations, the diminution of animal heat and vitality, and, finally, the complete paralysis of the vascular system. (10.)

Morbid appearances of the vascular system. The blood is sometimes, though not invariably fluid, after death, and dark colored. The heart is mostly flabby, and it is said that on its inner side, (especially the carneæ columnæ and valves, particularly of the left side,) is observed redness, sometimes diffused, sometimes in the form of spots, which penetrate a line in depth into the substance of the heart. The pericardium usually contains serum. (3. 54.)

Clinical Remarks.—*Hypertrophy.*—Dr. Wurmb, of Vienna, an excellent authority, says: "We think we do not err, if, relying upon our own experience at the sick-bed, we maintain that the respiratory symptoms of arsenical poisoning must be ascribed to the baneful effects of the poison on the heart. Symptoms indicative of an affection of the heart generally appear, in a very violent degree, at the commencement of poisoning with Arsenic, and are rarely absent, and its homœopathicity is as strongly marked as its clinical success would lead us to expect." Dr. Black says: "In organic affections of the heart, especially where there is dilatation or valvular disease, *it is the best remedy*; and it is worthy of note that, under its use, the various pains, the distressing palpitations, the dyspnœa, are relieved in a marked manner, and that while the organic disease may remain unchanged." Dr. Russell says: "As far as my experience goes, I fully concur in all that is said of the value of Arsenic in organic diseases of the heart; not only do the pains frequently subside by the use of this medicine, but the most formidable symptom we have to contend with, anasarca, is often arrested by a persevering administration of this remedy. (12. 46.)

Pericarditis.—Arsenicum is a most important remedy in this affection, and, as a rule, it may be selected in preference to all others, in that form of pericarditis attended with effusions of serum into the cavity, while Aconite is preferable for cases characterized by the preponderance of fibrinous depositions.

Venous System.—The general diffusion of blue or black spots over the bodies of individuals who have been poisoned with Arsenic, indicate its tendency to produce venous congestions. Such results would be naturally expected from a substance which weakens and paralyzes almost every tissue with which it comes in contact. As the tone of these vessels gradually becomes impaired, and the blood becomes decomposed, congestions, which sometimes extend to the capillaries, occur, paralysis supervenes, and the patient expires. The appearance of the bodies of those who have died from the poison is very similar to that of cholera and yellow fever cadavers. (10.)

ON THE TISSUES.

Muscular Tissue.—We have already observed that Hahnemann supposed that it impaired the tone of the muscular fibre, by diminishing the proportion and cohesion of the coagulable lymph of the blood. The power of muscles is dependent, to a considerable extent, upon the integrity of the nerves which supply them; and, as Arsenic operates as a depressor upon the entire cerebro-spinal system, it is evident that it acts specifically to diminish the vitality, tone, and strength of the muscular tissue. It is homœopathic to general and rapid failure of strength, great sense of prostration, tremulous condition of the limbs, and inability to make even slight muscular efforts. (10.)

Fibrous Tissues.—Its action upon the fibrous tissues is similar to that upon the muscular tissues—depressing and paralyzing. (10.)

Serous Tissues.—It probably exercises a specific action upon all of the serous membranes. It gives rise to inflammation, redness, and effusions of lymph or serum in the pleura, the pericardium, the arachnoid, and the peritoneum. It operates upon these tissues, firstly, by direct contact, and secondly, by impairing the integrity of the nerves which supply them. Lassaigne found it in the infiltrated pleura of a horse. Its action upon the pericardium is indicated by palpitations, and rapid and irregular action of the heart, anxious and oppressed respiration, sudden attacks of faintness, sharp pains in the cardiac region, great debility and sense of suffocation after ascending a stairs, walking rapidly, or lying down. Upon the pleura its influence is manifested by short, difficult, and painful respiration; short, dry cough; very rapid, but regular pulse; burning pains, and pleuritic stitches in the chest. Upon the arachnoid and the peritoneum it also exerts a specific action, although the manifestations are less apparent than upon the other membranes alluded to. (10.)

Mucous Tissue.—Arsenious-acid exerts a marked influence over the mucous membranes of the organism. This influence is manifested promptly, as many physiologists have demonstrated, whether it be introduced into the stomach, the blood, or applied to a denuded surface. Among its first and most important effects is gastro-enteritis, manifested by nausea, vomiting, purging, distention, hardness, and pain of the abdomen on pressure; heat, dryness, and constriction of the throat; intense thirst; tenesmus; rapid, feeble, and irregular pulse; cold, clammy sweats; and sympathetic irritation of the urino-genital apparatus. Many observers have noticed that it produces upon the gastro-intestinal mucous membrane a peculiar inflammatory action, which is accompanied with exudation, softening and ulceration of Peyer's plates. Hence its applicability in typhoid fevers and many affections of the mucous membrane of the stomach and intestines, especially when accompanied with inflammation, or ulceration, or softening. (10.)

Its action upon the mucous membrane of the respiratory apparatus

is much less constant and strongly marked than upon that of the gastro-intestinal canal. It produces effects which correspond closely with ordinary epidemic influenza, asthma, and certain anginose affections of the throat and larynx. A very uniform effect of large and repeated doses, and we have sometimes observed it from attenuated doses, is redness of the conjunctiva, and puffiness and smarting of the eye-lids. (10.)

The mucous membrane of the urethra occasionally gives evidence of inflammation, from repeated doses of the acid; but this effect is, in part, attributable to the contiguity of this part with the rectum, which is so actively impressed by the drug. The lining membrane of the uterus and vagina are likewise sometimes affected in a similar manner. (10.)

Glandular System.—Pereira has observed salivation from the use of allopathic doses of Arsenic. But, more frequently, it affects the salivary glands in such a manner as to suspend their secretion. It has been detected in the liver, kidneys, and spleen, and produces physiological and pathological phenomena, in each of these organs, which will be recorded under the appropriate heads. (10.)

EFFECTS ON THE CEREBRO-SPINAL SYSTEM.

Brain.—Delirium, coma, epilepsy, impaired memory, headache and sleeplessness, are among the physiological effects of this substance. *Post-mortem* examinations, of persons who have died from poisonous doses, have detected congestions of the veins and sinuses of the brain, inflammation of the membranes, serous effusion into the ventricles, inflammation of the substance of the brain, extravasation of blood in the occiput. (10.)

From the above physiological and pathological data, it is evident that it produces an impression upon the brain. Formerly we were of opinion that these cerebral symptoms and pathological appearances were produced by the violent vomitings of patients poisoned with the drug; but its marked specific action upon the spinal and ganglionic systems renders it almost conclusive that it has specific relations with the brain. (10.)

It acts primarily upon the encephalon, as an irritant, giving rise to sleeplessness, anxiety, general irritability, and mental and physical uneasiness, and succeeded by a semi-paralytic condition of the organ, just before death, indicated by obscuration of sight, stupefaction, and general paralysis of the mental powers. (10.)

Nerves of Motion.—The specific action of Arsenicum upon the anterior portion of the spinal column is strongly pronounced. Although it excites in the motor nerves a morbid irritability, which often persists until actual paralysis occurs, yet its actual effect is to impair the tone of this system of nerves. It is true that the Styrian peasant sometimes takes it, even in large doses, as a stomachic and general tonic, with the impression that under its influence he can exert an unusual

amount of muscular power, but the idea is fallacious. Whenever the Arsenic-eater takes his dose, the entire nervous system becomes morbidly sensitive, for the time being, and there will, apparently, be an exaltation of muscular force, but he, in reality, loses vitality and strength from the beginning. As the Opium-eater, or Haschish toper often mistakes the intoxicating effects of these substances for augmented mental power, so does the Styrian Arsenic-eater mistake a transient excitability of his nervous and muscular systems for an actual increase of strength. (10.)

Its depressing influence upon the nerves of motion is manifest, from the following general pathogenetic phenomena: Trembling of the limbs; rapid sinking of muscular strength, when not under the influence of the drug; stiffness and immobility of the limbs; heaviness, coldness, numbness, and dropsical swellings of the limbs. (10.)

The observations of Dr. Tschudi, with regard to the endurance and wonderful performances of these poison-eaters, in ascending mountains, and in other feats of agility, are to be taken with many "grains of salt." While the men take it to acquire strength and bottom, the peasant girls employ it to gain *embonpoint*, and fresh, rosy cheeks. But such strength and beauty, with their concomitant dangers, are dearly purchased. (10.)

Nerves of Sensation.—It acts specifically upon the entire spinal cord, impairing the tone of the nerves of sensation, as well as those of motion. It produces in the sentient nerves a morbid irritability, which often continues until death, while their vitality gradually diminishes. Pains, sensation of weakness, irritability, intolerable uneasiness, and, finally, numbness in the parts supplied by these nerves, are characteristic physiological effects of this substance. In the paralytic affections arising from its use, the sentient as well as the motor nerves are usually involved. (10.)

Among the nervous disorders in which it has been employed by both schools, with more or less success, may be cited nervous headaches, chorea, epilepsy, spasmodic asthma, whooping cough, sympathetic affections of the heart, and various other neuralgiæ. Under the appropriate heads, pertinent clinical facts will be recorded. (10.)

Ganglionic Nerves.—According to Hahnemann, one of the most important effects of Arsenicum is excessive irritation, and, finally, general paralysis and death of the ganglionic system of nerves. Thus, gradual failure of strength, diminution of animal heat, extreme nervous irritation and uneasiness, great tendency to decomposition of the fluids of the body, feeble and oppressed respiration, palpitation, weak and irregular action of the heart, spasmodic movements of various parts, and faintness, all point toward disorder of the ganglionic system of nerves. It is, therefore, homœopathic to morbid conditions, characterized by diminished vitality, and impending paralysis of this system. (10.)

ON THE NERVOUS SYSTEM.

Its effects upon the nervous system, and through it upon the vascular system and heart, are its chief and most important characteristics. In all the cases of poisoning, we find the most marked depression of the nervous system, and coldness of the skin; great feebleness of the heart's action, cold perspiration, oppressed respiration, sensation of approaching death and faintness, feeble, imperceptible, and intermitting pulse, and dimness of sight. Here we have a perfect and complete picture of the paroxysms of organic disease of the heart, and an almost perfect picture of a paroxysm of angina pectoris, from spasm or organic disease, with the exception of the pain in the chest, and, in some cases of poisoning, even this is not wanting. This fact should not be overlooked in the treatment of organic diseases of the heart. (46.)

Also in fevers, "where the skin is dusky, and the impulse and systolic sound of the heart both fail, (Latham's *softening of the heart*,) and death is imminent and threatening;" especially if there be icy coldness of the extremities, creeping upward to the trunk, imperceptible pulse, rapid failing of the powers of life, and gradual sinking and exhaustion, Arsenic is, most clearly, homœopathically indicated. (46.)

Clinical Remarks.—Dr. Johnson says, "Let our readers not forget the decided efficacy of many old remedies, in even the worst cases of neuralgia; perhaps, on the whole, none deserves our confidence better than Arsenic, internally." (11.)

Emotive and Sentient Sphere.—Excessive anxiety and restlessness, driving one to and fro in the daytime, and out of bed at night. Dread of being alone. Excessive fear of death, or mania of suicide. Great indifference and apathy to everything. (32.)

The head feels confused and heavy, while in the room, but is better on going into the open air. Vertigo. (32.)

Mind and Disposition.—Excessive anxiety and restlessness. Dread of being alone. Excessive fear of death, or suicidal mania. Melancholy sadness. Religious melancholy and reserve. Crying and weeping, with a few incoherent sentences. Scruples of conscience. Great indifference and apathy. Vexed at trifles. Crazy. Imbecility. Fits of anguish, of the most violent kind. He talks little, complains of anguish. Weakness of body and mind, without talking. (32. 26.)

Clinical Remarks.—The mental conditions especially characteristic of Arsenic are: Great anguish, anxiety, restlessness, general uneasiness, impatience, and apprehension of impending evil. We are informed by Dr. Leon that, in certain stages of yellow-fever when this mental condition obtains, this medicine is peculiarly beneficial. In all maladies, these mental phenomena are of much importance in guiding us in the selection of remedies. The following cases are in point. (10.)

CASE 1.—Mr. P., aged 32 years, of good constitution, consulted Dr. Weber (Arch. f. H., viii. 56) for the following condition of me-

lancholy : Whenever a fit of melancholy occurred, he was not at all able to sleep any night ; had no rest in bed, but constantly tossing about ; gets into a profuse perspiration ; finally, he could not stay in bed any longer, was obliged to walk about ; feeling, during such times, an indescribable anguish about the chest, continuing for six or eight nights ; even during the day the anguish continued, making him feel as though he had committed murder. This condition of things pursues him from place to place ; unable to remain in the same place for more than fifteen minutes. Sometimes tears were streaming down his cheeks, fancying, on meeting any of his friends, having offended them in some way, he wants to beg their pardon ; even to his wife, who, in reality, always has been treated kindly by him, he would fall on his knees, begging her not to be angry, &c., &c. This condition was always accompanied with great heat of the head and face. For several years such fits of melancholy, &c., would befall him ; at first, every six months only, then about every three months. He was treated allopathically, at first, by venesections and foot-baths, which had the effect of alleviating the duration of the attack by one-half, but instead of that, the paroxysms occurred much oftener. He took one dose of *Ars. 30* ; the next morning, he joyfully reported that he had slept perfectly sound all night, and felt well otherwise. After the expiration of a month from that time he had another attack, for which he received a dose of the same medicine as before, which not only relieved him, but effected a permanent cure. (26.)

CASE 2.—A blacksmith, aged thirty-six, of strong constitution, took a severe cold, after having had an attack of measles, and suffered from fits of melancholy in consequence of it, with the following symptoms : His looks betrayed great internal anguish and restlessness, and possessed with the idea that he could not be happy in his own house, which idea chased him, as it were, from one place to another, night and day ; during such a paroxysm, his face became hot and red, and he was afraid to be alone for fear he might commit suicide. *Beladonna* was given without success, and *Arsenic*, 24, effected a cure in a few days. (*Annal I.*, 66., *Ruckert.*) (26.)

CASE 3.—A woman, aged sixty-five, had been suffering, for a whole year, from periodical fits of melancholy, with the following symptoms : Great anguish, burning in the stomach, and retraction of the abdomen. The degree of anguish so great at night as to oblige her to rise from the bed and walk about the room ; towards evening she feels timid, with palpitation of the heart, accompanied with heat and a feeling of constriction in the precordial region, a similar feeling of constriction of the head ; face bloated, red, and hot ; pulse eighty per minute, and rather weak. Twinging, gnawing pain in the pit of the stomach, with water-brash, urging to urinate, with but little discharge of urine at the time. *Dr. Neumann* (*Pr. Beitr.*, 2., 145,) cured this case in one week, with *Arsenic*, 30. (26.)

Sensorium.—Diminished memory. Stupid, and weak feeling of the head. Muddled condition of the senses. Weakness of the mind.

Dullness and weakness of the mind, of long duration. Loss of sensation, loss of consciousness and speech. Delirium. In the room, the head feels confused and heavy, feels better in the open air. Vertigo, with throbbing in the head when raising it. When closing the eyes, in the evening, one is affected with vertigo, so that one has to hold on to something. (32. 26.)

Clinical Remarks.—Delirium, loss of consciousness, loss of speech, coma, vertigo, dizziness, and weakness of the head, are all strongly-marked pathogenetic effects of Arsenicum. But it must not be forgotten that those symptoms, and all others pertaining to the sensorium, may be entirely absent. Arsenical groups are of constant occurrence, in which the disposition and sensorial faculties are in a normal condition. (10.)

Head.—Trembling of the head. Falling out of the hair. Distention of the veins. Great swelling of the head. Vertigo on closing the eyes, returning every night. Vertigo—everything turning black before the eyes—with nausea while lying down; with confusion of the mind, stupefaction. Feeling of extreme heaviness of the head, with roaring in the ears. Aching, stupefying pain in the head, with heaviness in the forehead. Beating pain in the forehead, with inclination to vomit. Hemisrania. (19.) Feeling in the head of tightness, heaviness, confusion, dullness, loss of memory. Headache, pressing, pressing-benumbing, pressing-drawing, pressing-sticking pain, throbbing, tightness. (1. 26.) Periodical headaches; semilateral headaches. (32.)

Pathology.—Inflammation of the membranes of the brain. Turgescence of the vessels of the brain; the vessels of the brain are congested with blood. Thick, black, viscid blood in the vessels. Serous effusion into the ventricles. Inflammation of the substance of the brain. Extravasation of blood in the occiput. (1.) Redness of the brain and the membranes. Effusion of serum upon the brain. (3.)

Clinical Remarks.—We have carefully examined the symptoms of forty-three cases of poisoning by Arsenic, recorded by different observers, and find that headache had been present in thirty-two cases. The general character of these headaches has been pressing, beating, heavy, stupefying, and tearing. In eleven cases, the pains were intense. These effects were produced by poisonous doses of the crude drug. The dynamic phenomena which have been observed by homœopathic provers, from imponderable doses, are similar to these, but far more extensive and vital. Among them we find periodical headache, relieved by cold applications; semilateral headache, increased by eating; paroxysms of excessively painful hemisrania, with great weakness; coldness of the extremities, and viscid perspiration; icy coldness of the scalp, with severe itching after the paroxysm; vertigo, even to falling, and when sitting, or on rising from a sitting posture; heaviness in the forehead, or in the whole head; falling out of the hair of the head, and swelling of the head and face. (10.)

Teste asserts that "the symptoms caused by Arsenic seem to as-

sume a nervous form, the higher the attenuations with which the provings were instituted. Thence it follows that the lower attenuations are more particularly adapted to organic affections, and especially to the very acute affections of the bowels. We know, indeed, from experience, that the twelfth dilution of Arsenic was much more efficacious in cholera than the thirtieth. Having had an attack of cholera, in 1849, I have very accurately observed the differences on my own person." (Mat. Med., page 219.) (10.)

In the treatment of head-symptoms, to which Arsenicum is homœopathic, experience has taught us to prefer from the sixth to the twelfth dilutions, repeated at long intervals. While in the allopathic school, we have occasionally cured severe cranial neuralgiæ with Fowler's solution—pushing the doses according to the allopathic routine, until the poisonous influence of the drug became manifest, in the form of swellings of the head, face, and neck, nausea, griping, &c. But pernicious effects, in these instances, were observed, like a general depression of the nervous and vascular systems, and tendency to dropsies, dyspepsia, and bowel affections. The effects of dynamic doses, when properly selected, are far more prompt and reliable than the crude poisonous doses, and, under all circumstances, free from danger. (10.)

Allopathic physicians do, undoubtedly, cure different forms of headache with Arsenite of Potassæ, but their enormous doses always entail more ultimate suffering and danger upon their patients, than if the original malady had remained untreated. (10.)

Scalp.—The hairy scalp is painful, as if ecchymosed, especially when touched. Swelling of the head and face. Scald-head. Burning pustules on the head. Corrosive burning-itching of the hairy scalp. Pimples, covered with scurf, and painful when touched. Pustules, with burning pain. Tinea capitis, with swelling of the cervical glands. (32. 26.) Ulceration of the hairy scalp. Falling out of the hair and beard. Red tetter on the forehead and cheeks. (1.) Reappearance of an eruption like porrigo, which had been suppressed many years before by external applications, from repeated doses of the sixth attenuation. Reappearance of a previously suppressed itching, papular eruption, from repeated doses of the thirtieth decimal dilution. Intense aggravation of an eczematous eruption upon the forehead, from a few doses of the thirtieth decimal dilution. In three instances, reappearance of suddenly suppressed *crusta lactea*, from a few doses of the sixth dilution. (10.)

Pathology.—Œdematous condition of the scalp. Dark, livid, or greenish patches upon the scalp. (2.)

Clinical Remarks.—As an eliminator of latent chronic miasms, and of retained effete matters, resulting from metamorphoses of the tissues, Arsenicum is an agent of great value. In the dead body, it appears to neutralize the influence of the ever-present oxygen, as a decomposing agent, and thus to prevent the natural decay of the tissues. (10.) In the living organism, it exerts a singular influence upon all poisonous and effete matters, exciting them into activity, and causing their

development, through the pores, upon the skin. We imagine there are but few homœopathic physicians who have not observed the peculiar power of this substance, in aggravating existing eruptions, and in developing those which were latent. (10.)

Upon this hypothesis, we can readily understand why it has cured such a variety of cutaneous affections. Numerous reported cases are extant, of *tinea capitis*, *porrigo*, *eczema*, *lichen*, *crusta lactea*, *acne*, *lepra*, *psoriasis*, *impetigo*, and other chronic affections of the skin. (10.)

Many other medicines effect cures of cutaneous maladies by a direct action upon the poison in the blood and in the tissues. Thus, Mercury neutralizes the syphilitic poison by direct contact in the blood and in the tissues. Sulphur cures psora by actual contact with the acari. Thuja destroys the sycotic miasm by acting upon it within the organism. (10.)

Our experience with Rhus-tox. has been similar to that with Arsenicum. In nearly all cases, it has, in the first instance, increased the eruption upon the surface and developed it in new localities. We infer, therefore, that it operates as an eliminator, rather than as a direct neutralizer of morbid humors. (10.)

With regard to Arsenic, Trousseau and Pidoux ("Therap. et Mat. Med.," p. 322,) observe: "Arsenical preparations, administered in diseases of the skin, have uniform and easily appreciable effects. Thus, in squamous maladies, at the end of a few days, we observe an increase of activity in the eruption, the pimples and pustules becoming hot and irritable. After a time, they begin to heal in the centre, the edges contract little by little, and often, at the expiration of two months, sometimes sooner, we see a malady which had existed for many years disappear." (10.)

It has been considered most homœopathic in *dry* cutaneous diseases, and it unquestionably cures such cases more promptly than it does *moist* eruptions, like *eczema*, *impetigo*, &c. But its pathogenesis proves it to be strictly homœopathic in the latter maladies, and repeated, though sometimes tedious cures have confirmed the accuracy of these provings. (10.)

In *tinea capitis*, Hering advises Arsenicum, after Rhus, Sulphur and Staphisagria have been given and failed to cure. He recommends it particularly when there is a corrosive discharge, or when ulcers have formed upon the scalp. We have often prescribed it in this affection, in both high and low attenuations, but without any material benefit. (10.)

We have occasionally employed it, with decided advantage, in malignant cases of erysipelas of the face and scalp, with extensive supuration of the cellular substance, a tendency to gangrene, and a general prostration of the forces of the system. In such cases, we prefer from the sixth to the twelfth attenuations. (10.)

Porrigo and eczema of the scalp, forehead, and eyebrows have sometimes disappeared under the protracted use of Arsenicum, 30th, repeated at intervals of six or eight days. Lepra, psoriasis, and other scaly eruptions of the scalp, have also been apparently cured by the same dilutions. (10.)

Allopathic physicians likewise report numerous cures of these affections of the scalp, by large doses of the crude drug; but, as their treatment is almost invariably accompanied by powerful *external applications* to the affected parts, no reliance can be placed upon these reports. (10.)

Among its physiological effects, are repeated slight desquamations of the skin. The inference is, therefore, that it may prove useful in removing that condition of the scalp which causes dandruff. (10.)

It has been employed with much benefit, in the dry and parchment-like state of the entire surface, which is so often present in gouty subjects. In these cases, it operates by facilitating the sluggish, natural desquamations, and thus enabling the pores to throw off the retained effete and noxious matters. Under the use of rarely-repeated doses of a high dilution, the insensible perspiration becomes more abundant, and the skin gradually assumes its normal condition. (10.)

Fever.—Chills and heat, without sweat. Chills followed by sweat. Chills without either heat or sweat. Chills every evening, also fever-chill through the whole body, with hot forehead, warm face, and cold hands—without thirst or fever. Nightly fever, without thirst and sweat. Sweat, three nights in succession. Chills, mostly in the evening, afternoon, or noon, never at night—induced either by drinking, or while in the open air; either a general chill or local, either long-lasting or in alternation with fever. External coldness with internal heat, at the same time, or vice versa. During the chill, distressing uneasiness, ill-humored; distress and gnawing in precordial region, with nausea and tearing pain in the lower extremities. Fever, always in the evening and at night, of different degrees of intensity, as if the blood in the arteries were too hot, or burning, accompanied with distress and redness of the body, followed by nausea. Sweat at the termination of the fever, and on going to sleep. Sweat in the morning or forenoon. Sweat, either local or general, warm or clammy, cold sweat. Roaring in the ears, with tremor of the body during sweat, in the forenoon. Pulse, small, quick, weak, very quick, intermittent, wiry pulse. No thirst during the chill, but following the same. Thirst during the sweat; violent, burning thirst, but the patient can drink but little at a time. (21. 26.) Nightly, burning heat all over, with burning in all the veins, without thirst or sweat. (32. 26.)

Clinical Remarks.—*Intermittent Fever.*—It corresponds to this malady when the symptoms manifest themselves without much regularity, when the different stages are not strongly marked, and when the chills and hot sensations are prone to alternate, and to become mixed together. Thus, “Alternation or mingling of chilliness and heat; or heat, without any previous chilliness, followed by sweat. Chill, particularly after drinking, or after a meal, or after walking in the open air, or in the afternoon or evening, with inability to get warm, followed by dry heat, and, lastly, sweat at the termination of the fever. Heat, without any previous chilliness, followed by sweat.”

During the chill, “Absence of thirst, stretching of the limbs, yawn-

ng, general feeling of *malaise*, headache, great weakness and desire to lie down; pains in the back, limbs, stomach, and bowels; anxiety, irritability, and confusion of ideas; bitter taste in the mouth, nausea, vomiting, difficulty of breathing, general coldness of the surface."

During the fever, "Great thirst; oppressive headache in the forehead and temples; pain, oppression, and burnings in the stomach; great languor and debility; trembling of the limbs; surface dry, hot, and burning; restlessness, anxiety, delirium; sallow countenance, white fur upon the tongue, or tongue dry and red; bitter taste, nausea, heat and chilliness in alternation; palpitation, vertigo, humming in the ears, rapid pulse. Symptoms worse in the evening and at night."

During the sweat, "After the fever there are drowsiness and inclination to vomit, and very soon the sweating stage commences. We now have a diminution of the pains which accompanied the fever; cold perspiration, thirst, humming in the ears, great weakness, rapid, feeble, intermittent pulse, faintness and languor."

During the apyrexia, "Lassitude, bruised feeling in the limbs, confused feeling in the head, weakness, gastric irritation, and general *malaise*."

By the old school, Arsenical preparations have been empirically employed, as a remedy in intermittent fevers, for centuries. A knowledge, however, of its therapeutical properties was confined to the eastern nations, until a recent period, when Dr. Fowler, of England, brought it forward, and established it as a valuable medicine against this disease—next in value to Quinine. In France, Boudin, Tessier, Maillot, Néret, and Bernier have confirmed the observations of Fowler. (10.)

It is a singular fact that the two most valuable homœopathic remedies in intermittent fever, Arsenicum and China, should have been empirically seized upon by allopathists, as their chief remedies in the same disease! The usual doses of the old school are from one-twelfth to one-eighth of a grain. But much better results have been obtained by Dr. Boudin, late Physician General of the French troops in Algeria, from doses of one one-hundredth part of a grain, triturated with sugar of milk. (10.) This gentleman declares, ("Waring's Ther.," p. 76,) "that Arsenous-acid, properly prepared—triturated with sugar of milk—preserves, in the somewhat microscopical doses of the one-hundredth of a grain, all its medicinal energy, not only in marsh fevers, but also in a multitude of other diseases. * * * * I have been able, in a great number of cases, and by very small doses of Arsenious-acid, to put an end, in a short time, to quotidian, tertian, and quartan fevers—contracted in latitudes the most various, often complicated with chronic enlargements of the abdominal viscera, and which were incurable by the sulphate of Quinine. Out of three hundred and twenty-three cases, he cured two hundred and thirty-eight, many of which had resisted Quinine. He administers it about six hours before the expected paroxysms." (10.)

Unfortunately for suffering humanity, these allopathic gentlemen

have not given us any data with reference to the pernicious after-effects of these large doses. No allusion is ever made to the arsenical dropsies, and the arsenical cachexies which so often follow this treatment. (10.)

M. Boudin has reduced the ordinary dose of this school from one-eighth to one-hundredth of a grain, and has witnessed greatly increased curative effects from the reduction. Why does not this eminent medical gentleman continue to reduce his doses *still more*? By so doing, might he not find that the imponderable doses of the homœopathist are all-sufficient to grapple with the malady, and thus save patients from the deleterious influence of toxical quantities of the drug? We commend to M. Boudin, and to all other medical men, infinitesimal doses, if they would cure *cito, tuto, et jucunde*. (10.)

Abdominal Typhus.—Under "*Abdomen*," we have already referred to its applicability in this malady. In this place, therefore, we shall only enumerate the prominent indications of the remedy. They are as follows: Irritation and ulceration of Peyer's glands, and of the follicles of Brunner; tenderness, or sharp pain in the right iliac fossa, upon pressure; tendency to, or actual decomposition of the blood, and therefore, occasional nasal and intestinal hæmorrhages. Derangement of the cerebral and nervous apparatus. Tongue dry, dark in the centre, and red on the borders; petechial eruptions and sudamina; tympanitic distention of the cœcum and colon; urine scanty and dark. Pale and sunken face. Constipation, followed by diarrhœa. Universal prostration; general collapse. For other arsenical phenomena, in connection with this disease, we refer the reader to the symptomatology. (10.)

Yellow Fever.—After the active symptoms have been subdued by Aconite and Belladonna—and the patient remains very weak, thirsty, anxious, or stupid; excessively restless, particularly at night; with constant jactitation; sunken countenance; rapid and feeble pulse; nausea, diarrhœa; dry and red, or pale and moist tongue; scanty and red urine; hot, pungent, and dry, or cold and clammy skin; hæmorrhages from the gums, nose, and intestines, and an evident tendency to decomposition of the blood—Arsenicum is an invaluable remedy. Our friend, Dr. A. Leon, has often employed this drug for the above group of symptoms, with satisfactory results. (10.)

It is an important remedy in malignant forms of scarlatina, variola, and erysipelas. In the two first maladies, autopsical examinations have sometimes revealed irritation of the follicles of Brunner, and ulceration of the Peyerian patches. In certain stages of each of these affections the blood is also altered and decomposed—losing its red color and fibrinous consistency. When this general condition obtains, and other symptoms correspond, it will often prove an efficient remedy. (10.)

CASE 1.—G. W., aged thirty-five years, of strong constitution, was taken, in May, with a *tertian intermittent fever*. The chills were severe, lasting for several hours, with alternate burning heat, weak-

ness and prostration, heaviness of the lower extremities, depressed mental condition, violent headache and stitches in the temples, nausea, very bad taste in the mouth, aversion to all kinds of food during the paroxysm, bowels constipated, lips swollen and covered with crusts. Dr. Seidel prescribed three doses of Arsenic—one to be taken in the evening, one the next morning, and one the following evening; after which there was no recurrence of the disease. [*Allg. Hom. Z.*, 1. 46.] (26.)

CASE 2.—Mr. E., aged forty years, formerly healthy and strong, but, for nine months past, suffering from *intermittent fever*, which appeared first as a quartan, then changing to tertian, and afterwards to the quotidian type, for which he received allopathic treatment, with Chinine-sulph., China-regia, Ammon-mur., &c., without being cured. He now consulted a homœopathic physician, Dr. Gaspary, for the following condition of things: Vertigo, with great weakness, and stupefying headache before the chill. During the fever, his head felt heavy and confused; he lay in bed as if stupefied, with violent pain and vertigo on rising; obscuration of sight from debility; buzzing and roaring in the ears during the fever; but not at any other time; dryness of the mouth without thirst, little or no appetite, with natural taste; during the apyrexia, rising of food, pressure in the stomach with nausea, stool regular. *Fever-paroxysm* occurred every fourth day, in the forenoon, with yawning, stretching of the limbs, and a feeling of the greatest discomfort; gradually changing into severe shaking chills, with headache, tightness of the chest, coldness of the abdomen, without thirst. He was obliged to go to bed, and, two hours afterwards, a violent burning fever set in; the skin became very red, all over the body, his mouth was parched and slimy, without thirst. The heat continued until evening, when he fell asleep, awaking about midnight with great anguish and violent sweat, which continued until noon of the next day, followed by a feeling of great languor, uneasiness, irritable mood, &c. He received Arsenic, but afterwards had two more paroxysms, which were, however, much lighter than the two previous ones, and his general health improved from day to day. About a month later, he had a recurrence of the disease, but was promptly and effectually cured by a few doses of Arsenic. [*Annal*, iv., 427.] (26.)

CASE 3.—A case of *Febris Intermittens Quotidiana Duplex*, in a boy aged two years, of feeble constitution—has had the fever and ague for the past three weeks. At three o'clock, A. M., he gets icy coldness of the whole body; finger and toe-nails and lips turn blue; he lies on the bed, with sunken face, closed eyes, looking like a corpse; after the lapse of an hour, he gets into a burning heat, asking hastily for water to drink; after which a profuse sweat sets in, and continues until about four o'clock, P. M. The second paroxysm begins at eight o'clock, P. M., the same day, but is of shorter duration, and less intense. During the apyrexia, the child is ill-humored, eats little or nothing, but is thirsty, and complains of pain in the abdomen;

his sleep is restless, and his body emaciated. Dr. Y. (*Hom. Bekehrungsepisteln*, 1837, p. 37) gave the little patient Arsenic, 3, in the evening. The following attack was much lighter, and, after a few more doses of the same medicine, he recovered perfectly, in the course of a few days. (26.)

Sleep.—Irresistible inclination to sleep. Great uneasiness, and sleepless tossing about in bed. Starting of the limbs when on the point of falling asleep, or during sleep. Nightly restlessness, anguish about the heart, and violent burning under the skin, as if hot water was flowing through the veins. Anxious dreams. (32. 26.) Starting, as if frightened, during sleep. Suffocative fits on lying down, and after sleeping. Symptoms worse at night in bed, and in the morning. (1.)

Clinical Remarks.—It is applicable in the restless, anxious, and sleepless condition, which sometimes accompanies maladies of a typhoid and nervous type. It is indicated in stupid, drowsy, and indifferent states of mind, as well as for extreme uneasiness, sleeplessness, and nightly jactitation. It is likewise homœopathically related to typhoid conditions, with more or less tendency to coma. (10.)

Skin.—Burning, and burning itching. Dry, parchment-like, or else blue and cold skin. Rash, especially white. Itch-like pimples. Varioloid. Urticaria. Blood blisters covering the whole body. Petechiæ, with putrid fever. Black pock, as if gangrenous. Suppurating herpes, with violent burning pain. Ichorous ulcers, with raised edges or thin crusts. Gangrenous or cancerous ulcers. Insensible or extremely painful ulcers, with stinging and burning, especially when the parts become cold. Discolored nails. Warts. Chilblains. Varices. General anasarca. (32. 26.) Repeated bran-like desquamations, which leave the skin dry, like parchment. Appearance upon the thighs, legs, and arms of an itching eruption, like lichen, from repeated doses of the thirtieth decimal dilution. [?] Intense itching of the skin, without any appearance of eruption, from the same dilution. (10.)

Pathology.—In persons who have died from long-continued small doses, the following appearances have been observed upon the skin: Face and extremities swollen; slight desquamation over the entire surface of the body; patches upon different parts of the skin, of a brown or mahogany color; eruptions of various kinds, which have been driven to the surface by the poison; dry and parchment-like appearance of the skin; dry, scaly, and glossy skin, which appears to lie loosely over the muscles; indurated, dry, and scorbutic state of the skin; blue or black spots over the body, from very large doses. These pathological appearances have been observed by Hahnemann, Noack and Trinks, Hunt, Orfila, Von Tschudi, and Guy. Our own suppositions induce us to suppose that very large doses operate upon the skin in such a manner as to produce actual decomposition, followed by gangrenous spots, and sometimes ulcerations; while long-continued small doses act upon any latent miasm which may be present in the blood, and upon effete matters arising from metamorphoses of the

tissues, which are not eliminated by their natural outlets. Therefore, we are presented with eruptions of various kinds, and other morbid cutaneous appearances. (10.)

Clinical Remarks.—We have conjectured that minute doses of the drug possess the power of exciting into activity certain internal latent humors, and of determining their development upon the skin. This is without doubt the most natural and safe mode of eliminating these morbid poisons. In cases where no chronic humor exists in the organism, the medicine excites into activity all retained effete products of the changed tissues, and throws them off from the surface in the form of slight desquamations. These desquamations are especially prone to occur after the use of high dilutions. (10.) [?]

The cutaneous affections over which it seems to have a special influence, are *chronic eczema, urticaria, lepra*, the different varieties of *acne, chronic lichen, psoriasis, herpetic eruptions, impetigo, scurvy, miliaria*, and *scaly eruptions generally*. (10.)

Our experience with this remedy, in this class of maladies, has been somewhat extensive. In numerous instances, during our professional career, we have tested its effects, from allopathic doses of Fowler's solution up to the highest attenuation of the homœopathist, and we are perfectly convinced of the vast superiority of rarely-repeated doses of the higher dilutions in effecting cures. Frequently-repeated doses of the stronger preparations have almost invariably aggravated every variety of cutaneous disease in our hands, while doses of the thirtieth dilution, repeated at intervals of one or two weeks, have generally been productive of benefit, and occasionally of permanent cures. We can call to mind several cases of obstinate chronic eczema, acne, and lepra, which had, for months, and even years, resisted the action of often-repeated low dilutions of this and other cutaneous remedies, and which were speedily cured by a few doses of the thirtieth dilution, given at long intervals. (10.)

In the *allopathic* school, Arsenic has been employed as a remedy in chronic cutaneous diseases for several centuries, and it is still held in very high estimation. Teste, in his "*Materia Medica*," page 200, remarks: "If we had no other authorities to consult than modern allopathic physicians, their practice, except the doses, accords so perfectly with our own, that we might almost feel tempted to regard their mode of treating cutaneous diseases internally, with Arsenious-acid, as copied from Hahnemann." But I really believe this is not the case. For, as early as 1789, Adair published the happy results which he had obtained with Arsenious-acid, taken internally, in *obstinate tetters*. Rush, of Philadelphia, confirmed Adair's observations about the same period. Lastly, in 1806, Girdlestone, but especially Willan and Pearson, in England, had popularized this use of Arsenic by a number of successful cases; and Biett was one of the first who tried it in France. Cazenave expresses himself as follows, concerning the use of Arsenious-acid in cutaneous diseases: "It is proven, now-a-days, that wonderful results are obtained with Arsenious-acid in the treatment of

cutaneous diseases, both in the dry forms and in the chronic eczema and intertrigo. This remedy is less successful in papulous eruptions, &c., and, in general, it has almost always failed in the various forms of porrigo, acne, sycosis, &c. It may be very useful in the elephantiasis of the Greeks; to the treatment of acute exanthemata, it is not applicable, as a general rule. Homœopathy can add but little to these statements." (10.)

We have no doubt that certain cutaneous eruptions have frequently disappeared under the long-continued allopathic use of *Liquor Potassæ Arsenitis*. We concede, when this active poison is administered according to the method of Dr. Hunt, of Margate, in doses of five drops and upwards, three or four times daily, for many months, and, after the disappearance of the eruption, to still persevere in its use, for as many months as the disease had existed years, that the chronic humor or miasm which had caused the eruption may, in some instances, be neutralized and destroyed. But we as firmly believe that the drug, in accomplishing this object, always inflicts permanent injury upon the organism, in the form of dropsical affections, derangement of the digestive and nervous systems, and a general loss of vital force. (10.)

By this method, the action of the drug is *chemical* and *mechanical*—decomposing and destroying the morbid cause, and, at the same time, impairing the integrity and strength of the tissues with which its crude atoms come in contact. In these instances, the action of the medicine is *chemical* and *tissue-destroying*. But, when administered in these maladies in imponderable doses, especially at the thirtieth attenuation and upwards, it acts *dynamically*, or perhaps *catalytically*, and produces such an effect upon the internal morbid molecules as to determine them to the surface, and thus cause their elimination through the skin. The smaller atoms possess another important advantage over crude ones, in being able, from their minuteness, to penetrate the capillaries, and thus to exercise an influence upon these important vessels, and upon the sentient extremities of the nerves. It is upon these minute structures that the infinitesimal atoms of malarial-miasmatic contagions and epidemic poisons exercise their principal influence. (10.)

CASE 1.—M., aged forty-three years, a blacksmith, of strong constitution, was suffering for three months from ill-conditional ulcers over the face, forehead, neck, chest, fore-arms, and hands, with terrible burning pain. They at first appeared as small red blotches, which would soon fill with a straw-colored fluid, and then burst and discharge an acrid humor, which would corrode the surrounding skin and form large crusts, beneath which the process of ulceration continued, &c. He now and then felt a sense of shivering in the affected parts. No sleep, on account of the continued terrible burning pain. Yellow diarrhœic stools, turbid yellow urine, general *malaise*, and ill-humored. Dr. Schubert (Arch. f. hom. H., II., 104) gave him *Ars*, 30, in fractional doses, and in two weeks effected a complete cure. (26.)

CASE 2.—A woman, aged about sixty years, had suffered for several

months with small ill-conditioned ulcers, extending over the whole body, except the face, accompanied with burning pain and intense itching, which caused her to scratch violently but without relief, and always feeling better in a warm temperature. When one crop of ulcers had apparently healed up, another crop would appear—the patient losing flesh very rapidly. Digestion very much disturbed, each mouthful of food or drink causing pressure in the œsophagus, as though it had lodged there. Very great languor and prostration; very restless and interrupted sleep. The fever, which occurred every day, beginning with chills, caused an increased burning in the eruption, followed by heat, and finally sweat. Dr. Gross (Arch. f. hom. H., I., 105) ordered Ars., 30, in repeated doses, which effected a cure in three weeks. (26.)

CASE 3.—A case of "*scabies herpetica cum superveniente febris intermittente*," in a man aged about twenty-three years. Patient said he had been troubled for six weeks past with a quartan intermittent fever. His face is pale and œdematous, his eyes sunken and surrounded with blue circles; the muscles of the face flabby, vacant expression of the eyes, and a dragging motion of the body on walking. The arms, thighs, and knees were covered with thick brown crusts, from under which thick, greenish, foul-smelling matter exuded; between the fingers, bend of the elbows, and popliteal spaces were scattered yellow, broad pustules, some containing pus and others covered with brownish crusts, causing a painful itching and burning, especially towards evening, after exercise, and when the body became heated, from which he had been suffering for several years. Dr. Gross prescribed Ars., 30, one dose every evening, for about six weeks, at the expiration of which the patient reported himself as being cured. (21. 26.)

CASE 4.—Herpes, in the case of a student, reported by Dr. Kretschmar, (Arch. f. hom., H. viii., 1, 69,) of the size of a dollar piece, situated between the shoulder-blades, accompanied with intense burning, especially at night, so as to prevent sleep; the integument very red, and covered with minute blisters, often scratched open in consequence of intolerable itching and burning. Not being well versed in the selection of drugs at that time, Dr. K. gave Sulphur for five days, without any benefit, while the patient noticed another spot making its appearance in the præcordial region, causing as much burning as if it had been touched with Oil of Vitriol. He now received fractional doses of Ars., 30, and, in the course of ten days, was completely cured. (26.)

CASE 5.—A male child, three weeks old, was afflicted with furunculi all over the body, from the size of a pea to the size of a filbert, which, after twelve or twenty-four hours, filled with blood and some matter, causing apparently much pain. Every day new pustules made their appearance. Dr. Tietze ordered Ars., 30, to be taken in fractional doses for eight days, at the expiration of which a cure was effected. [Allg. Hom. Z., iii., 1, 15.] (26.)

AS AN ESCHAROTIC AND IN CANCER.

Clinical Remarks.—Though employed as a caustic, yet the nature of its chemical influence on the animal tissues is unknown. Hence it is termed by some a *dynamical* caustic, in opposition to those caustics acting by known chemical agencies. Mr. Blackadder asserts that the danger of employing Arsenic consists in not employing a sufficient quantity. A small quantity, he says, becomes absorbed, whereas a large quantity quickly destroys the organization of the part and stops absorption. (9. 46.)

In estimating its action as an escharotic, particular attention should be paid to the following facts, viz.: that *it is an irritant, and not a corrosive* poison. Its effects upon the surfaces with which it comes in contact are radically different from those of Nitrate of Silver, or the strong acids, or other tissue-destroying corrosives. Nitrate of Silver acts indifferently upon the sound skin, the mucous surfaces, or an open sore. Arsenic, on the contrary, acts with great reluctance upon the sound skin. Nitrate of Silver chemically destroys the tissues with which it comes in contact—*burns them up*; Arsenic, on the contrary, kills the tissues with which it comes in contact, *by poisoning them*, and thus causing them to die. Nitrate of Silver enters into chemical union with the chlorides and albuminates of the flesh, and presents an impassable wall to the absorption of the salt; Arsenic, on the contrary, only has its absorption limited by the incapacity of the dying tissues to carry on the process; each fresh portion of tissue with which it is brought into contact in its progress is capable of taking up and repeating the process of absorption until its death. (46.)

Therefore, in using it as an escharotic, we must bear these matters in mind, and allow for its alterative action upon the surrounding tissues through absorption, as well as its escharotic effects upon the part itself. (46.)

M. Manoc has been engaged in investigating the action of Friar Cosmè's Arsenical Paste, in more than one hundred and fifty instances, and he has come to the conclusion that the paste penetrates the cancerous tissues by a sort of special action which is limited to it. This action is not simply escharotic, for, beneath the superficial blackish layer which the caustic has immediately disorganized, the subjacent morbid tissue seems struck with death, though it may retain its proper texture and almost its ordinary appearance. Later, the cancerous mass is separated by eliminatory inflammation, which is set up around its limits. The same paste, which extends its influence more than six centimetres deep in a cancer of close texture, when applied to superficial gnawing ulcers, usually only destroys the morbid texture, however superficial this may be, and respects the sound parts. (17. 46.) That this is not *always* the case, is clearly shown by those many cases of poisoning on record, from the local outward application of Arsenic to sores and ulcers, when acute internal lesions have ensued, attributable to the absorption of the Arsenic. (46.)

He also thinks that the absorption of Arsenic is proportionate to the amount of surface involved, and that a sore of small dimensions need never cause any uneasiness, but that, in a large cancerous ulceration, it should only be attacked in portions at a time. (17. 46.)

CASE 1.—Mrs. A. suffered from uterine hæmorrhage, and the speculum revealed a fungous growth, the size of a walnut, pouring forth blood on the slightest touch, which rapidly filled the speculum. The practitioner, (a homœopathic one.) after vainly applying lunar caustic, besides the usual internal remedies for cancer, was dismissed, and another physician called. He being also unsuccessful, she returned to the first, begging him to save her life. She was at this time, July 9, reduced to a pale and marble-like skeleton, and it appeared to me wonderful that she could have retained the spark of life so long. I decided upon Arsenic, topically applied. I used very finely-powdered white oxide of Arsenic; it was cautiously applied to the fungus, through the speculum, by means of the sponge of a probang, previously moistened with water. The bleeding ceased that day. I repeated the application on the twenty-third and twenty-fifth, and, on the twenty-eighth, the tumor was expelled. My patient progressed favorably, and at the end of a month was strong enough to enjoy a drive into the country. She lived five years after the treatment, and suffered but little from the absorption of the Arsenic into the system. (12. 46.)

CASE 2.—J. B., aged thirty-five, had a large cartilaginous tumor, resembling cancer, growing from the right side of the inferior maxillary bone. Had been operated upon, by cutting, at the North Devon Infirmary; the tumor, since the operation, has increased rapidly. She cannot close her mouth, consequently cannot masticate; the growth extends to the pharynx, rendering the respiration noisy and deglutition difficult. Without removing the entire half of the lower jaw, there appeared no hope of cure. I proposed the operation, but no persuasion of mine could induce her to submit to it; as a last resource, I used Arsenic. To apply it on the surface of the mucous membrane would, no doubt, have proved fatal. I therefore made an incision into the substance, by means of a narrow bistoury, filled a grooved director with Arsenious-acid, and armed a probe with cotton-wool; the probe was placed on the director, and the whole introduced into the wound; the director was then withdrawn, leaving the Arsenic to work its way. The application produced violent pain and great constitutional disturbance, but the woman is now alive and healthy, and the mother of a large family. (12. 46.)

CASE 3.—A. C., aged seventeen, a farm-servant, consulted me in March, 1834. He had an ulcer on the scrotum, over the right testicle. Having seen cases of chimney-sweeps' cancer in London, I recognized the disease, and I removed a piece of the scrotum the size of a half crown. The part healed by granulation, and for six months the patient was free, but at the end of that time the disease reappeared. I then decided on applying Arsenic, and the part sloughed off, leaving the tunica-vaginalis more cleanly dissected than it could possibly have

been by the knife of the most skilful operator. Granulation and cicatrization followed rapidly, and the cure was permanent.

CASE 4.—R. P., a farmer, was afflicted with a cauliflower excrescence growing from the internal malleolus; it was nearly three inches in diameter, of a circular form, and had the appearance of consolidated jelly. It rendered locomotion impossible, for it projected an inch or more from the surface of the skin, and was very painful. We first passed a double ligature around and through the tumor, and tied it; it was tightened daily until the part fell off, and the surface was then dusted liberally with Arsenic. It produced very serious effects, exciting great alarm for the patient's safety; however, the remainder of the mass sloughed away, and left the external lateral ligament uninjured. The wound healed in a short time, and, for a period of six years, the patient was a hale and hearty man, but eventually died of cancer, appearing in the same place. (12. 46.)

CASE 5.—Miss S. presented herself for treatment in April, 1842. The right side of the dorsum of the nose, from the origin of the eyebrow downward, for an inch, and from the centre of the dorsum of the nose to the internal canthus of the eye, was occupied with an ulcer of a greyish-white color, with irregular flattened borders and uneven surface. At the upper and lower part of this ulcer were two small warts, round and shining, and at their apices showing a ramification of vessels. The deepest part of the ulcer was at its centre, yet the bone was not exposed, and close beside this excavated part there lay a spongy, elevated mass. The lower punctum-lachrymalis was imbedded in a similar mass. The whole bled easily on the slightest touch, especially the spongy parts, upon which a brown scab often appeared, which was soon thrown off again. The purulent discharge was not considerable; the surrounding skin was normal, except that upon the forehead and cheeks were three warts, similar to those above described but not injected. It was of fourteen years' standing. The patient had used purgatives, Mercury, Iodide of Potassium, in enormous doses, and tincture of Iodine, outwardly. The ulcer had also been cauterized with Nitrate of Silver. All was in vain, so that, at last, the patient left off all medicine, and only dressed the ulcer with some mild salve. The history and symptoms clearly indicated the cancerous nature of the malady. The homœopathic treatment consisted of Arsenic, 8, six drops every two days, for internal use, and for external use an ointment made with about two grains of the first decimal trituration of Arsenic, and a sufficient quantity of fresh lard. This was spread on a piece of lint, and fastened on the ulcer with sticking-plaster. The dressing was at first renewed twice a day, afterwards more irregularly. After it had been applied for a few days, the warts reddened, became gradually reddish-brown, and, in the course of ten days, they, as well as the ulcer, formed a very hard brown scab, when the eyelids, forehead, and one cheek became slightly inflamed and œdematous. The scab was softened and detached, by means of water-compresses, in a few days, when the œdema disap-

peared, and the raw surface of the ulcer was treated as before. The œdema never returned again to any extent. In a short time the greater part of the ulcer became clean, the suspicious-looking spots were further cauterized with the Arsenic, the trituration of which was applied, either dry or moistened. The healthy-looking parts were not touched. They healed rapidly. In six weeks a cicatrix was produced, which had a glazed appearance, and was only half the size of the original ulcer; at lower punctum only, there still remained a suspicious-looking spot. This it was resolved to cauterize with the Arsenic, but the patient was obliged to go away before it could be done. She returned in February, 1853, in consequence of the spot at the lachrymal point having enlarged, and a small ulcerated point having begun in the centre of the cicatrix. The former treatment was commenced and carried out with success; but she eventually died of cancer of the stomach. (12. 46.)

Attomyr affirms that he has cured a case of cancer of the lip. A. L., six years old, had lost the left half of the upper lip, and the soft parts extending to the zygoma, and also a considerable portion about the angle of the mouth, by a cancerous ulcer. Arsenic, sixth dilution, brought about the healing of the ulcer in six weeks. (12. 46.)

Eyes.—Christison says, under the use of Arsenic, the conjunctiva is often so injected as to seem inflamed; eyes red and sparkling, redness of the eyes, giddiness, and intolerance of light, eyes bloodshot, with burning pain. (11.)

Wood and Bache say that it causes œdema, especially of the face and eyelids, with a feeling of stiffness of these parts; livid circle around the eyelids. (11.) Hunt says, in a few days, or possibly weeks, while using Arsenic, a pricking sensation is felt in the tarsi, and the conjunctiva becomes slightly inflamed; a slight degree of conjunctivitis, in forty-nine cases out of fifty, takes precedence of the more grave affections which indicate an overdose. Five-drop doses, three times a day, for thirty-five days, caused inflammation of both conjunctiva, which lasted seven weeks. Same doses caused tenderness of the tarsi, but no redness, in five days; in fifteen days, conjunctiva were slightly and partially inflamed; in five days, slight partial redness of conjunctiva, eyelids stiff and itchy, stiffness and pricking in the eyelids almost every evening, after taking three doses of five drops. (11.) In a fortnight, conjunctiva inflamed, and eyelids puffy. (11.)

In a fortnight, in another case, the eyes were exceedingly weak, lower eyelids puffed and swollen, conjunctiva reddened, and tears ready to start. (11.)

In another case, in twenty-six days, the conjunctiva became inflamed, the lower eyelids swollen and puffy, the eyes itched and were weak, conjunctiva much inflamed, with pain in the orbits. (11.)

In a fourth case, in eighteen days, the conjunctiva were slightly inflamed, and eyes weak. (11.)

In another case, five drops were taken, three times a day. In three days, the patient complained of excessive weakness of the eyes, sensations of smarting, itching, and pricking in the eyelids, and a copious secretion of tears.

In a sixth case, in seven days, from two and a half drops, three times a day, conjunctivitis; one drop, three times a day, for five days more, conjunctivitis no better, rather worse. In half-drop doses, conjunctiva still very troublesome; dimness of sight; left eye became so singularly affected that she could only see the half of an object with it. (11.)

In the eighth case, five drops were given, three times a day, for three weeks, when the conjunctiva became very red, sore, and injected. (11.)

In the ninth case, the conjunctiva became inflamed, and eyelids tumefied. While taking Arsenicum for six weeks, the conjunctiva became inflamed; the right eye became better, but the *left* eye remained considerably inflamed. In two weeks more, while continuing the medicine, both eyes became inflamed and painful—but the right eye, though inflamed, looked more natural; eyes much inflamed, with copious fluid discharge from the nose. (11.)

Vogt says Arsenic causes warmth of the body, especially felt in the forehead and eyebrows.

Blue circles about the eyes. Itching and prickling around the eyes and temples. Sunken eyes, with yellowish countenance. Swelling of the eyelids. Painless soft swelling under the eyes. Twitching of the eyelids, and drawing pain in the eyes. Constant twitching of the lids, with discharge of tears from the eyes. Burning pain and dryness of the eyelids. Violent inflammation of the eyelids. Discharge of corrosive tears from the eyes. Eyes and lids inflamed. Chemosis. Blue spots in the white of the eye. Violent pain in the eyes. Burning and tearing pain in the eyes. Photophobia. Sparks before the eyes. Specks on the cornea. Dreadful distortion of the eyes, fixed wild look. Protrusion of the eyes; glistening of the eyes. Obscuration of sight. Amblyopia. Total blindness. (19. 26.) Ophthalmia, with violent burning pain. Arthritic, scrofulous, and rheumatic ophthalmia. Lachrymation and nightly agglutination. Dim and yellow eyes. (32. 26.) Redness of the conjunctiva. (3.) Swelling and stiffness of the palpebræ. Heat, tenderness, and itching of the tarsi. (44.) Burning coryza. (1.)

Clinical Remarks.—Dr. Dudgeon states that Arsenicum exerts a most extensive action upon the eyes; the conjunctiva is not alone the seat of its action, but the sclerotic and choroid membranes also. It is homœopathic to some stages or varieties of catarrhal, scrofulous, rheumatic, arthritic, and scorbutic ophthalmia; also in some stages of Egyptian and gonorrhœal, and more especially when the pains are extremely violent and burning, and the secretions of an acrid, serous nature. He has also found it very useful in exanthematic ophthalmia; in that following measles, especially when the lachrymation is excessive, and the tears produce corrosion of the cheeks, and doubts not

that it will be equally serviceable in some cases occurring during, or after scarlet-fever or varioloid. It seems to be the only remedy from which we may expect any advantage in the ophthalmia from uterine phlebitis. From its producing swelling of the eyes, and a beating like that of a pulse in the eyes, each throb being attended with a stitch; and from its well-known influence upon the hæmorrhoidal vessels, and the typical character of some of its effects, it would seem that it must prove homœopathic and useful against hæmorrhoidal and menstrual ophthalmia. (12. 54.)

Rüchert furnishes the following clinical indications for the use of *Arsenicum* in inflammation of the eye: (11. 54.)

"Swelling and spasmodic closure of the eyelids, which cannot be opened on account of the inexpressible pains. Adhesion of the eyelashes. Injection of the conjunctiva, which is covered with red blood-vessels, and forms a wall around the cornea, (chemosis); redness and granular appearance near the cornea. Bluish redness of some of the blood-vessels. Violent pains from opening the eye, especially at night, when the sufferings are most severe. Violent *burning* in the eye, which prevents the patient from eating or sleeping; burning and piercing pains in the eye. Profuse discharge of corrosive tears on opening the eye; hot tears; small ulcers on the cornea; dimness of sight; contraction of the pupils. *Excessive intolerance of light*; feeling as if the eyes had not room enough in the orbit, and were being pushed or pulled out. Redness of the white of the eye, and dimness of the cornea. *Intermittent inflammation of the eye, commencing in the morning or afternoon, and diminishing by ten o'clock at night.* Aching and throbbing pains. Annoying pulsation in the ball of the eye and its neighborhood. Dimness of vision, cannot see small objects, even when quite near, and large objects only at the distance of ten feet." (11. 54.) Dr. Peters, in his work on diseases of the eye, concisely gives the indications for the use of *Arsenic* in diseases of the eye. (54.)

Pustules on the conjunctiva have recovered while using *Arsenicum*. Hering advises it in scrofulous ophthalmia, "when the pains are of a burning character, as if produced by red-hot coals, and when spots have already made their appearance upon the eye." We have occasionally prescribed it with success in scrofulous ulcerations of the cornea, with swelling and redness of the eyelids and the puncta-lachrymalis, profuse and piercing, burning, stitching pains in the eyes; secretion from the meibomian glands, copious lachrymation, after Sulphur, Euphrasia, Graphite, and Calcerea had failed to afford relief. (10.)

Many diseases, especially pustular ophthalmia, will come to an end at some time; when twenty remedies have failed, the last one will seem to cure. (11.)

Helmuth ("Practice of Surgery," p. 460) observes: "*Arsenic*, besides exercising a powerful action upon the sclerotic and choroid coats, is very beneficial in inflammation of the conjunctiva. The symptoms which require its use are, violent and intense redness of

the membrane, with congestion of the vessels; swelling of the eyelids; a profuse flow of acrid tears; nightly agglutination; great photophobia; aggravation of pain from exposure to light, and a feeling as if sand were lodged in the eyes." (10.)

The same author has employed it advantageously in purulent ophthalmia, when the pains are very violent and *burning*, and there is an acrid, serous secretion, with pains of an intermittent character. (10.)

Dr. Dudgeon prescribes it in gonorrhœal ophthalmia, when the pains are severe, occurring in paroxysms; when there are violent stabbings in the eye, the eyeball feeling like a coal of fire. In these cases, Dr. Dudgeon also advises topical applications of Arsenicum, Argentum-nitricum, Euphrasia, Rhus, and Mercurius. He mixes a drop of the dilution prescribed internally, with a teacupful of water, and applies it to the eye, two or three times a day, by means of a soft rag. (12. 10.)

In syphilitic ulcerations of the cornea, Arsenicum often follows Mercurius with advantage. Patients who have become much emaciated and exhausted from the severity and obstinate continuence of the disease, notwithstanding the use of Mercurius, Nitric-acid, Thuja, Hepar-sulphur, and Calcareo. (10.)

Helmuth has cured, in fourteen days, a violent inflammation of the eye, with effusion of pus into the anterior chamber, with Arsenicum, fourth dilution, every four hours. (10.)

Professor Kitchen, of Philadelphia, considers Arsenicum, 3, and Conium, 3, in alternation—every four hours, in acute cases, and night and morning, in chronic cases—the best remedies in *scrofulous ophthalmia*. He has been uniformly successful with them. (10.)

Arsenicum has been successfully employed after Sulphur in hydrophthalmia. (10.) Rückert gives the following pertinent cases:

CASE 1.—A girl, aged six years, subject from the slightest cause to violent inflammation of the lids, with photophobia, received much treatment with no benefit. The little patient was then put under the care of Dr. Hermann, in the following condition: On removing the green shade, which she wore over her eyes, the lids presented a swollen and inflamed appearance; ciliæ agglutinated; discharge of corroding tears; conjunctiva-sclerotica injected, and cornea had marks of healed ulcers, and a few open ones. She complained of biting, stinging, burning pain in the eyes, with photophobia. Ars., 30, effected a cure in ten days. (21. 26.)

CASE 2.—A man, aged twenty-eight years, of delicate and cachectic habitus, was cured of the following affection by a few doses of Ars., 30, prescribed by Dr. Stapf: Conjunctiva-bulbosa of the left eye, which was much injected; photophobia; vision impaired; violent throbbing in the affected eye, returning as it were every other day, after a good night's rest; the pressure and throbbing in the eye began at five o'clock, A. M.; gradually increasing in intensity until five o'clock, P. M., and then decreasing by degrees, until ten o'clock in the evening, at which time she was freed from the above. (21. 26.)

CASE 3.—Two cases of ophthalmia-scrofulosa. One case of scrofulous inflammation of the left eye, with two ulcers on the cornea, with shooting pains and lachrymation, was cured by Ars., 3, in twenty-three days; and another similar case, in a woman aged twenty-seven, was also cured by Ars., 3, in sixteen days. (12. 26.)

CASE 4.—A case of carcinoma of the inner canthus of the right eye, in a young lady who had been affected with it for some years, in the shape of little warts, easily bleeding on being touched, and for which she had received very active treatment without benefit. Being disgusted with this empirical procedure, she dropped all treatment for some considerable time, and kept the diseased parts covered with simple lard, spread on a little piece of linen. After a lapse of time, she was induced to consult Dr. Bähr, who treated the case with Ars., 8, six drops every third day, and an external application of the first trituration of Arsenic, mixed with lard. This he continued for about eight months, making the intervals in the administration of doses gradually longer. Accompanying the above, she had occasionally cedematous swelling of the lids, forehead, and cheeks, sleeplessness at night, a feeling of constriction in the chest, pressure in the stomach, increased thirst, and flashes of heat. At the expiration of the eight months, the disease had disappeared; but, some time afterwards, she was suddenly taken with continued terrible vomiting, accompanied with the greatest anguish, &c., &c., and, in the course of thirty-six hours, was a corpse. Autopsy revealed cancer of the stomach. (12. 26.)

One of our Allopathic brethren, Dr. Mackenzie, (*London Journal of Medicine*, July, 1851,) recommends it highly in catarrhal ophthalmia. Was this gentleman aware that one of its pathogenetic effects is redness and inflammation of the conjunctiva? The same writer also commends it in some forms of catarrh, coryza, and hay-fever. Of course he has never heard of homœopathy! Dr. Mackenzie must be considered a great medical wag. (10.)

Wurmb recommends Arsenic in those inflammatory affections of the eyes and lids which are situated more particularly in the conjunctiva. He thinks it is more specially indicated when there is strong injection of the conjunctiva, tendency to ulceration, violent pains, increased flow of tears, great photophobia, and weakness of vision. (12. 46.)

CASE 5.—A girl, aged six, had suffered for several years from repeatedly recurring attacks of ophthalmia, which were so obstinate under ordinary treatment that she usually remained several months in succession without being able to leave off the local and internal remedies; and latterly there remained, after one of these attacks, so much irritability of the eyes that the slightest exciting cause brought on photophobia and inflammation for several days, so that the child could hardly ever be without a green shade. I was requested to treat the child. She could scarcely open the eyes, even under the large green shade, which shut out almost every ray of light. I found the

eyelids swollen, red at the edges; the few remaining cilia matted together with pus. On opening the eyes, the tears flowed out copiously, and were of an irritating quality, as was shown by the excoriated state of the cheek; the conjunctiva-sclerotica was intersected with enlarged single vessels, and both corneæ displayed cicatrices and ulcers still open. The patient complained of smarting and burning pains, much aggravated by the light, which she dreaded exceedingly, and all objects appeared as if seen through a veil. Dr. Hermann gave Arsenic, and the eyes were well in eight or ten days. Since that time, adds the report, ten months have passed without any return of the disorder, and the patient has not once been obliged to use her shade. (12. 46)

CASE 6.—Mr. M., aged twenty-eight, was attacked with ophthalmia. There was injection of the conjunctiva and severe aching of the eye. The symptoms then shifted to the left eye, with intense photophobia. Pulsation extended all about the eye, and the patient described the pain as intense. It went on, with no diminution, until Arsenic was given, when the symptoms immediately yielded. (12. 46.)

According to Gross, as quoted by Ruckert, Arsenic has been used with success in obstinate inflammation of the eyes, following an attack of grieppe, (influenza,) with subsequent ulcers or obscurations of the cornea, with severe photophobia; and Dr. Hartung praises its use, in cases where the palpebral conjunctiva is very much inflamed, with violent burning pain, and inability to open the eyes. (26.)

CASE 7.—A girl, aged fourteen years, of delicate constitution, has been suffering for forty-eight hours with violent inflammation of the conjunctivæ; was cured by Arsenic, 24. [Arch., 8, 2, 75, Ng.] (26.)

CASE 8.—A girl, aged twenty-two years, a frequent sufferer from erysipelatous inflammations, whose family is subject to phlebitis and varicose veins, had been affected for eight days with inflammation of the conjunctivæ-palpebrarum, and severe swelling of the lids. Dr. Schelling ordered Arsenic, a dose to be taken every two hours, and effected a cure in forty-eight hours. [Allg. Hom. Ztg., 38, 148.] (26.)

CASE 9.—A case of scleritis, with severe photophobia, in a servant-girl, who, in consequence of having taken a severe cold, had been suffering thus for several weeks; treatment had afforded no relief. Dr. Hermann (Arch., 12, 3, iii.) effected a cure in a few days by Arsenic, 30. (26.)

CASE 10.—A man, aged twenty-eight years, of delicate, cachectic constitution, had been suffering from an intermittent (periodical) inflammation of the eyes. Aconite and Bellad. were given without benefit; but Arsenic, 30, effected a cure in three days. [Arch., 18, 2, 43, Stapf.] (26.)

CASE 11.—Mrs. B., aged thirty-two, of delicate constitution, was troubled with an inflammation of the conjunctiva, returning every afternoon at four o'clock, which Dr. Lorbacher cured by two doses of Arsenic, 30, one dose at night, and the other was given in the morning. [Vierty, 1, 2, 257.] (26.)

CASE 12.—A lady, fifty-four years of age, already suffering for five weeks from coryza, and, for eight days past, troubled with ophthalmia, as follows: Swelling of the lids, and inflammation of the sclerotica, with darting pain through the ball of the eye on motion. Dr. Haustein prescribed Ars., 6, one dose to be taken at night, and one in the morning, which effected a cure in five days. [*Allg. Hom. Ztg.*, 39. 36] (26.)

The indications for its employment in *scrofulous ophthalmia*, according to Ruckert, are as follows: *Eyelids swollen*, with inflamed edges; profuse secretion from the meibomian glands, causing agglutination of the lids in the morning, accompanied with spasmodic contraction of the same, causing sharp pain on attempting to open the same.

Conjunctiva-bulbosum filled with inflamed blood-vessels; cellular tissues degenerated, inflamed with a diffusion of congested venous capillaries.

Appearance of *cornea* smoky, opaque, with small ulcers, and blue-greyish spots; iris and pupil entirely obscured. *Carunculæ-lachrymalis* inflamed and swollen. Photophobia in the highest degree, with frequent discharge of acrid corroding tears, discharge of muco-pus, accompanied with burning, stitching, cutting pain. (26.)

CASES 13 and 14.—Two cases of vascular tumor and warty excrescence of the cornea—the one case in a boy aged six years, and the other in a boy aged two years. The tumor being the size of a large pin's head, grey in appearance, and of some months' standing. A cure was effected in both cases, within a period of three weeks, by Ars. 30, [Schwarze 17. 18.] (26.)

Ears.—Dark red, or pinkish-colored swelling of the ear, surrounded by vesicles. Extensive swelling of the ears, covered with a crust. Roaring in the ears, particularly during the paroxysms of pain. Singing in the ears, when sitting. (19. 26.)

Pathology.—External ears of a greenish, livid, or dark color. Bloody froth running from the ear. (2.) (Edematous swelling of the ears. (3.)

Clinical Remarks.—In influenzas, with great debility, severe coryza, and inflammation of the throat and eustachian tubes, causing roaring in the ears and deafness, Arsenicum is one of our best remedies. (10.)

It is homœopathic in advanced stages of malignant erysipelas of the face, head, and ears, with sanguineous and frothy discharges from the ears, tendency to suppuration of the external ears, and a general typhoid condition. (10.)

It is very useful in dry and scaly eruptions about the ears. It has likewise been employed successfully against humid tetter upon the ears. (10.)

It has been serviceable in ringing of the ears, caused by excessive loss of blood, and extreme depression of the nervous system, after the employment of China. (10.)

Arsenicum is most homœopathic to profuse serous discharges from the ears, with more or less redness, excoriation, and outbreak of pimples; the little patients most subject to these attacks are pale, with a

pasty and puffy complexion. Pulsatilla is most indicated when the discharges are thick and mucous. According to Schriveltguy, quoted by Pereira, under the continued use of *Baryta-muriatica*, catarrhal discharges from the eyes, nose, and ears take place. This remedy deserves much more attention in blenorrhœas of the eyes, nose, and ears than it has received. Increased secretion from, and pain in the mucous membranes lining the nasal and aural passages have also been observed from the use of *Hydriodate of Potash*; extreme irritation of the nasal, conjunctival, and bronchial mucous membranes have been produced by as small a dose as five grains of the Iodide. Among other effects upon the mucous membranes, are tumefaction of the gums, salivation, coryza, conjunctivitis, and augmented secretion from the genital mucous membranes. These remedies are more serviceable in some ear affections, than some of those in more common use. (11.)

Arsenicum, Kali-hydriodicum, and Baryta-muriatica may prove useful in some affections of the ceruminous glands of the ear; for, according to Wilde, the moment an inflammation is set up in the neighboring structures they cease to secrete, and these remedies and Pulsatilla may aid in reproducing the secretion. When otorrhœa is present, their function is also suspended; but, at times, they may secrete a thin, light-colored honey-like cerumen, so quickly and in such quantity as to pour out at the external meatus. (11.)

Arsenicum, Cantharides, Rhus, and other remedies, are useful against some diseases of the skin, especially *herpetic* and *eczematous*, which, according to Wilde, may either be seated in the meatus alone, or extend from the auricle into it. If allowed to proceed unchecked, they produce thickening of the lining of the passage, lessening its calibre, and, in time, steal over the external layer of the membrana-tympani. As a result of this chronic inflammation, the lining of the meatus becomes thickened, and may sometimes be peeled off like the detached cuticle of a blister; or a thick pasty matter, formed of softened cuticle, may coat over the passage; and occasionally the whole thimble-like cuticular lining of the meatus may come out *en masse*. Arsenicum may also prove useful in cases of intolerable *itching* of the meatus, with a dry, branny state of the cuticle, lasting for months, and giving rise to redness and heat of the auricle. (11.)

Malignant diseases of the ear are fortunately rare; when they occur, Arsenicum, Carbo-animalis, and Thuja should be borne in mind. (11.)

In *strumous myringitis*, or scrofulous inflammation of the drum of the ear, or more properly the mucous layer of the membrana-tympani, Kali-hyd., and Baryt.-mur. are more useful than Arsenicum, and also in that form of otitis which occurs in connection with, or alternates with scrofulous ophthalmia. (11.)

In *simple chronic myringitis*, or chronic inflammation of the membrana-tympani, Arsenicum may prove the more useful remedy. This is a very frequent affection; Wilde found it in 396 cases out of 2,385 of ear-disease, or in one of every six. It may be present in perfectly

painless deafness, and also in cases attended by paroxysms of pain, coming on at intervals, between which the patient is free from all uneasiness; the latter is said to be more common in females, from twenty to forty years of age, who are suffering from menstrual irregularities. Wilde says, the appearance of the membrana-tympani is too peculiar to be mistaken; it presents a general thickening and opacity, particularly of its lower portion; besides which there is, almost invariably, a number of spots, about the size of pin's heads, of greater density than the rest and of a pearly lustre, studded over the surface of the membrane. In many cases it presents the appearance of crumpled parchment. During the quiescent periods, Wilde says, we may only remark a few straggling vessels, carrying red blood, spread over the surface of the tympanum, and for the most part coursing from above downwards, parallel with the handle of the malleus. Upon any provocation, however, such as cold, or other exciting causes, the membrane will, in a few hours, and often without any increase of pain, become of a uniform dark red color, precisely like the *pannus* of the cornea, a disease of which it is the manifest analogue. But the greater the amount of thickening and opacity, the less will be the degree of vascularity and redness which the membrane is capable of assuming, as we perceive in cases of dense opacity of the cornea, owing, no doubt, to the greater quantity of deposit of lymph obstructing the flow of red blood, by diminishing, and perhaps also obliterating the calibre of the vessels. In such cases the membrane is often insensible. (11.)

Wilde has frequently seen a thin, skim-milk-colored scale on the membrana-tympani, like that which mineral lotions, Lead, Alum, &c., leave on the cornea. (11.)

Cases of this kind are often of many years' standing, and Wilde is convinced that they are generally mistaken for instances of nervous deafness. The patient is very deaf, speaks in a loud inharmonious voice, and has suffered from noises in the ears of all descriptions for several years. The patient is also hopeless, as he or she has tried and suffered many things from many physicians; broken down in health, wearied by the variety of opinions and the multiplicity of applications; sick from hope deferred and from the increase of the tinnitus, the ear-martyr has become remarkably nervous and irritable, brooding over her malady, and rendered unhappy and discontented from being unable to take part in general conversation. On examination, the membrana-tympani is found thickened, opaque, slightly vascular, and sometimes much collapsed or drawn inward towards the inner wall of the tympanum, so that the handle of the malleus forms a manifest projection; it has also lost its polish, and become of a dull pale color. Attacks of earache have occurred, with more or less frequency, particularly in winter, and such attacks were often preceded or accompanied by stuffing of the nose and symptoms of catarrh, and were generally induced by cold. The application of a solution of lunar caustic, every third or fourth day, aids materially the use of Arseni-

cum. In attacks of periodic pain, with a higher degree and more generally diffused vascularity, the tincture of the root of Aconite may be applied around the ear and over the mastoid process, while a solution of Morphine may be dropped into the ear, with sufficient frequency promptly to relieve the pain. The watery solution of Morphine is infinitely preferable to the tincture of Opium, which is much more frequently used. The whole of the meatus may be filled up with a warm solution of Morphine, the head being held well over to one side, to allow the liquid to penetrate down to the drum of the ear; in a few moments the head may be righted, and the superabundant liquid allowed to run out upon a napkin held over the ear; then a bit of cotton, well moistened with the solution of Morphine, may be lightly pressed into the outer portion of the meatus, and a thickly-folded napkin, wet with quite warm water, will form a cleanly and convenient substitute for a poultice over the ear. I heal all severe earaches in this way, in addition to the use of proper internal remedies, with speedy relief and rapid recovery. In families in which earache is apt to occur, I always give these simple directions, and save my patients many hours of agonizing suffering at night; and I think the cases also recover much more rapidly than without it. I think that the Morphine exerts not only an anodyne, but an antiphlogistic action upon the inflammation of the ear. In severe cases, in adults, I should not hesitate to give Morphine internally, in alternation with Aconite, Pulsatilla, &c., &c. (11.)

Nose.—Swelling, redness, and pain in the nose. Bleeding from the nose, with violent vomiting. Burning in the nose. (19.) Hard tumor in the nose; cancer of the nose. Ulcerated condition of the nostrils, high up in the nose, with discharge of fetid and bitter tasting ichor. Dryness of the nose, or else discharge of an acrid fluid. Coryza every morning when waking, with a good deal of sneezing. Profuse fluent coryza, with stoppage of the nose. (32. 26.)

Pathology.—Destruction of the soft parts of the nose. Bloody froth from the nasal cavities. (32.)

Clinical Remarks.—"Arsenic," remarks Hartmann, ("Chron. Dis.," vol. iv., p. 31,) "may sometimes require some other medicine with it; but it is undoubtedly the most valuable agent when the cancerous dyscrasia has tainted the organism. It is the sovereign remedy for cancer of the nose, tongue, and alveolæ." (10.)

It is one of our best remedies in ozæna, when the pains are violent, burning, and throbbing. Likewise in *noli me tangere*, both internally and topically, it is a remedy of great value. In alluding to its external employment in this malady, Pereira ("Mat. Med. and Ther.," vol. i., p. 548,) observes: "In some forms of severe and unmanageable ulceration, especially *lupus*, or *noli me tangere*, arsenical applications are employed, with occasional benefit, where all other local remedies fail. In such cases, Arsenic is not to be regarded as a mere caustic; for other, and far more powerful agents of this kind are generally useless. It must act by substitution—that is, it sets up a new action in the part, incompatible with that of the disease." (10.)

It is quite homœopathic in catarrhal affections, characterized by burning and soreness of the nostrils, acrid and corrosive discharge from the nostrils, or dryness and obstruction of the nares, great debility, slight febrile symptoms, thirst, great restlessness at night, and sneezing. It has been most frequently appropriate in epidemic catarrhs. (10.)

In acne of the nose, with swelling, pain, copper-colored redness, and disposition to ulceration, Arsenicum, continued for a long time, has effected permanent cures. (10.)

Arsenicum has often been highly useful in catarrhal and scrofulous ulcerations of the nostrils and frontal sinuses, with thin, sanious, muco-purulent and fetid discharges, and sensation of burning, soreness, and excoriation of the nasal passages. (10.)

It is occasionally useful in inflammation, swelling, and ulceration of the nasal structures, accompanying advanced stages of tertiary syphilis, when the vital powers had become nearly exhausted. (10.)

This remedy is used very successfully in cases of disease of the nose, particularly lupus exedens and lupus non-exedens. In the former case, it has been employed in the form of a paste, made of equal parts of Arsenic and animal charcoal. Dupuytren employed a powder, composed of one part of Arsenic and two hundred parts of Calomel. [Wilson, "Dis. of Skin," p. 295.] (75. 54.)

It has been given internally for both forms of this disease. (54.)

CASE 1.—*Carcinoma-nasi*, in a man aged sixty-six, who had been affected with it for about eight or nine years, on the right ala of the nose, being one inch in length and half an inch wide, covered with thick, black scurfs, with occasional discharge of humid, ichorous fluid therefrom, and violent burning-stinging pain in the part. Under the continued use of Ars., 30, for some time, a cure was effected. [Humphreys.] (26.)

CASE 2.—A lady, aged forty-two, affected with dry and fluent coryza in alternation, troublesome burning in the nose, and a discharge of an acrid, corroding nature. Dr. Schüler gave two doses of Ars., which effected a cure. [Annal, iv., 433. Quoted by Rückert.] (26.)

Face.—Yellow, livid, or bluish face. Bloated or sunken face, with sunken eyes, which are surrounded by a blue margin, and with a pointed nose. Disfigured, cadaverous face. Swelling of the face, especially below the eyelids. Pale, death-colored face. Distorted features, *facies Hippocratica*. Eruptions on the forehead; blotches; ulcers all over the face; wart-shaped ulcer on the cheek; crusta-lactea, herpes-furfuraceus, acne-rosacea. Swelling of the lips, preceded by a burning-stinging itching; burning eruption around the mouth; ulcerated eruption around the lips; cancerous eruption, with a thick crust, and a base having the appearance of lard, on the lower lip. Spreading ulcer on the lips, with tearing and biting pain in the day-time, during movement. Swelling of the submaxillary glands. (32. 26.) Swelling, inflammation, easily-bleeding lips; bluish lips, with shrivelled brownish streaks, or black spots. Painful lumps on the lips. (21. 26.) Countenance flushed and swollen. (3.)

Pathology.—Dark-brown color of the face. Expression of countenance placid and cheerful. Blue circle around the eyes. Bluish lips. Green, yellow, or black discoloration of the whole, or of portions of the face. (32.) Puffy, œdematous appearance of the face. Face sunken, cadaverous, pale, or livid. Lips swollen and livid, and bloody froth issuing from the mouth and nose. (2.)

Clinical Remarks.—Arsenicum is generally regarded as an important remedy in cancerous affections of the face. Empirically, it has been thus employed for several centuries, and cures have from time to time been reported from its use in a crude form. A writer in the *British Journal of Homœopathy*, vol. iv., page 250, writes thus: "Arsenic is to be preferred before Belladonna, Baryta carbonica, or Conium, in very malignant ulcers of the face or nose, which increase on all sides, bleed easily, and have not been caused by any external injury, such as blows or bruises; but, from the first, show plainly that they are the outward signs of a deeply-seated internal disease, and are, therefore, often met with in cachectic individuals. Carbo-veg., indeed, approaches very near to Arsenic in this respect; yet the latter is to be preferred unconditionally, when the tendency to destroy the surrounding parts is distinctly marked in the ulcer." (10.)

Hartmann considers Arsenicum a positive specific against cancers of the nose and lips. (10.)

It is appropriate in certain stages of *noli me tangere*. When the ulceration has extended from the glands and follicles of the nose to the cartilages, and the pains are of a burning, stinging character, with frequent hæmorrhages, an ichorous fetid discharge, and general prostration of strength, Arsenicum, repeated at long intervals, will sometimes be productive of benefit. (10.)

It is homœopathic to neuralgia of the branches of the fifth pair of nerves, characterized by burning and stinging pains in the teeth, face and temples, coldness of the affected parts, great weakness, anxiety, nightly restlessness, paroxysms coming on periodically, symptoms worse after repose, eating, fatigue, and at night in bed, and relieved temporarily by hot applications.

Hartmann ("Chron. Dis.," vol. iv., p. 27,) gives the following indications for the use of Arsenic in prosopalgia: "Pain semi-lateral, located among the eyes, more below than above, sometimes extending over the temporal region; the pain was burning, or drawing-stitching, as from a multitude of red-hot needles; the whole face assumed an expression approaching to the hippocratic countenance, disappearing with the attack. Arsenic is likewise useful for intermittent prosopalgia, characterized by a violent stitching pain deep in the right eye, aggravated by motion; also for prosopalgia commencing with a tearing-darting pain in the teeth, which rouses the patient from sleep before midnight, extending to the right temple and right side of the face, and driving the patient to despair. This pain abates in a few hours, but sometimes only towards morning." (10.)

In almost every variety of cutaneous affection of the face, this drug

is appropriate, in virtue of its action as an eliminator of morbid matters. It is most homœopathic in enfeebled and broken-down constitutions, with greatly impaired vitality, and an almost entire loss of recuperative force. (10.)

CASE 1.—Aloysia Lyde, aged six years, had lost the upper half of the lip, and part of the soft parts of the cheek, on the same side, by cancerous ulceration. She received from Dr. Attomyr Ars., 6, a dose every week, and in six weeks from that time she was completely cured. (21. 26.)

CASE 2.—Dr. Lobethal cured a case, in a woman aged seventy, of carcinoma of the face, by Ars., 30, internally, and Ars., 30, mixed with lard, externally. He also used Silicea, both internally and externally; [duration of treatment not given]. (21. 26.)

CASE 3.—*Tumor-labii*, in a case of a man fifty-five years old, of three years' duration, and situated on the left half of the under lip, of the size of a bean, presenting a dark red, inflamed swelling, with irregular surface, with constant burning, drawing, stitching pains through the same and adjacent parts, subject to frequent bleeding. Five doses of Ars., 30, one dose given every week, effected a cure. (81. 26.)

Mouth, Teeth, &c.—Pain in several teeth, and feeling of looseness of the same. Falling out of all the teeth. Stitching pain in the gums, especially to the touch, and at night, relieved by warmth. Toothache pressing, tearing, jerking, frequently with swelling of the cheek; better on sitting up in bed, and by the application of warmth. (21. 26.) Spasmodic grinding of the teeth. The gums bleed easily. (32.)

Troublesome dryness of the mouth and throat, with thirst. Increased flow of saliva; bloody saliva. Dry tongue; insensible, as if having been burnt, and having no taste. (21.) Profuse secretion of saliva. Inflammation of buccal cavity, of reddish-blue appearance, with burning pain. Stiffness of the tongue; inflammation of the tongue; exulceration of the tongue; dry, black tongue, burning hot. (19.) Fetid smell from the mouth. Dryness of the mouth, with violent thirst, which obliges him to drink frequently, although but little at a time. (32. 26.) Silvery whiteness of the tongue. Tongue dry and furred. Salivation. (2)

Pathology.—Blue lips, and the tip of the tongue closely adherent to the teeth. Mouth closed. (32.) Bloody saliva around the mouth. Tongue dry, dark, and contracted, or pale and flabby. Lips swollen and bluish. (3.) Inflammation of the salivary glands. (2.)

Clinical Remarks.—Hartmann ("Chron. Dis.," vol. iv., p. 30,) gives the following indications for the use of Arsenic in cancerous and other ulcerations of the lips and tongue: "Dry, cracked lips; brown streak on the lips, as if burnt; bleeding of the lower lip; ulcerated eruption around the lips; cancer-like eruption on the lower lip, with thick crust; hard, pod-shaped edges, with burning pain, particularly when the parts become cold, and with a lardaceous bottom. Spreading ulcer

on the lip, painful in the evening when in bed, with tearing and smarting in the daytime during motion, which is worst when touching the ulcer and in the open air, disturbing the night's rest; corrosion of the edges of the tongue, in front, with smarting; the tongue is blackish, cracked. It is undoubtedly the most valuable agent when the cancerous dyscrasia has tainted the organism; it is the sovereign remedy for cancer of the nose, tongue, and alveolæ." (10.)

It is an important remedy in *cancrum-oris* of feeble and cachectic children; or which comes on after scarlatina, measles, and typhoid fever. The symptoms which especially point to it are: ulcerations of a gangrenous character, fetid breath, dark and dry tongue, or salivation; inflammation and redness of the gums, which are inclined to bleed readily; burning pains in the ulcerations; looseness of the teeth; toothache; rapid and feeble pulse; great debility, and a general condition verging upon a typhoid. (10.) Nitric-acid is a much better remedy. (11.)

In malignant forms of *glossitis*, with tendency to gangrene, burning and smarting pains, inflammation of the buccal cavity, tongue dry and black, or profuse secretion of bloody saliva, and great thirst, it has been employed with success. Hartmann prescribes it in the induration which sometimes remains after the acute inflammation has subsided. (10.)

Allopathic physicians have also employed it successfully in cancerous and malignant ulcers of the tongue. They also commend it highly as a topical application in toothache. A writer in the *Medical Times*, April 14, 1849, Dr. Stokes, prescribes one-twentieth of a grain of Arsenious-acid, combined with a small quantity of Morphia and Creosote, as an application, on a small piece of cotton-wool, to the sensitive part of the tooth, to be retained in its place by a piece of soft wax. Dr. Stokes regards this application as specific against toothache. Other old-school physicians have used the same preparation, mixed with powdered nut-galls. (10.)

The topical application of Arsenic has been successfully employed to relieve toothache. A sixteenth of a grain, mixed with mastic, is placed in the hollow of the decayed tooth. (3. 54.)

CASE 1.—Aloysia Lyde, aged six years, had lost part of the left upper lip, and part of the cheek, by cancerous ulceration. She received from Dr. Attomyr, Ars., 6, a dose every week, and in six weeks from that time, she was completely cured. (21. 26.)

CASE 2.—G. B., aged twenty-three years, had a *cancer* of the tongue, with the following symptoms: Great difficulty and pain during the act of deglutition, and pain extending behind the ears, occiput, and neck; pulse small and tremulous; hands cold, and covered with clammy sweat; body emaciated, and very feeble. Dr. Lane effected a cure by a solution of Arsenic, (Fowler's?) internally and externally administered. [Duration of treatment, and strength of medicine not given. 26.] (21. 26.)

CASE 3.—*Tumor-labii*, in a man aged fifty-five years, of three years'

duration, and situated on the left half of the under lip, of the size of an ordinary bean, presenting a dark red, inflamed swelling, with irregular surface; constant burning, drawing-stitching pain through the same, and subject to frequent bleeding. Five doses of Ars., 30, at intervals of a week, effected a cure. (81. 26.)

CASE 4.—A little girl, aged four years, was affected with a cancerous tumor on the vermillion border of the lip, near the angle of the mouth, of a soft, cheesy feel, and with rough edges, and which gradually continued to increase. A consultation of allopathic physicians was had, and their advice was excision of the tumor. This operation was declined, and the patient was placed under the care of Dr. Weber, who prescribed Arsenic, 5, which had the effect of diminishing it very materially in a short time; but, after a time, it ceased to produce an impression, when Calcar., 30, was resorted to, to finish the cure. [Allg. H. Ztg., 39, 1.] (26.)

CASE 5.—A babe, aged eight weeks, had been affected with a cancerous tumor on the under lip, as large as a good-sized bean, ever since it was one month old, beginning at first with a little spot, and gradually developing itself as above stated. Dr. Rummel gave three doses of Arsenic, 18, which effected a cure in three weeks. (64. 26.)

CASE 6.—A girl, aged seventeen years, of scanty menstruation, became affected with a painless pustule on her right cheek. On scratching it open, it not only failed to heal, but it gradually increased in size, so as to occupy the best part of the right cheek, appearing in the form of a warty excrescence in a partial state of ulceration. Dr. Ivan gave two doses of Ars., 30, and Sulph., 30., each at weekly intervals, and, in the course of a month, a cure was accomplished. In a year from that time, a similar state of things occurred, which was attended with the same success, as regards treatment. [Arch. 19, 1, 79.] Quoted by Rückert. (26.)

Appetite and Taste.—Bitterness of the mouth, particularly after eating and drinking, every other day, or early in the morning. Saltish, dry, putrid, fetid, and sour taste; food tastes insipid. Repugnance to food. Violent, unquenchable, burning, and suffocative thirst, or else complete absence of thirst. Desire for acids. The mere thought of food nauseates him. When eating, his chest feels compressed; eating is preceded by nausea. After a meal, headache. Pressure in the stomach, with empty eructations; nausea and vomiting; distention of the abdomen, or pressure and cutting in the abdomen, after eating or drinking. After drinking, he suffers with shivering and chilliness, the vomiting and diarrhoea set in again, eructation and gagging take place. (32. 26.) Intense thirst for cold drinks, water, wine, brandy, and beer. Mouth and throat feel dry, constricted, and hot. (3.)

Clinical Remarks.—Great thirst and dryness of the mouth are undoubtedly characteristic symptoms of this medicine, but adipsia also is an indication for its employment. Of seventeen cases of Arsenic-poisoning, reported by Dr. Guy, in Waring's "Therapeutics," thirst

was present in fifteen, and absent in two cases. It is especially indicated in cases of urgent thirst, accompanying inflammatory conditions of the gastro-intestinal mucous membrane. Also in repugnance to food or drink, induced by long-continued gastric or intestinal irritation, with softening or ulceration of the membrane. It is useful against a bitter, or sour, or insipid taste, proceeding from a loss of tone in the digestive apparatus, and a general failure of the vital powers. (10.)

In many maladies, great thirst or adipsia, and repugnance to food, constitute the leading indications for the use of this remedy. (10.)

Chlorate of Potash is often useful against dryness of the mouth and tongue, when Arsenicum and other remedies fail. (11.)

Pharynx and Œsophagus.—Scraping sensation in the throat. Sore throat when swallowing, as from an internal swelling, (sore and burning). Gangrenous angina. Everything he swallows causes a pressure in the œsophagus, as if it had lodged there. Constriction of the fauces. Impeded deglutition, as if the parts were paralyzed. Burning pain in the fauces. (32. 26.) Inflammation of the palate; dysphagia. Terrible burning pain in the œsophagus. Angina-maligna, with aphthæ. Swelling and erosions of the œsophagus. Constriction of the œsophagus and larynx. Spasms of the œsophagus, pharynx, and larynx; also trachea, with hiccough, and great difficulty in swallowing. (19. 26.) Paralysis of the tongue and gullet, in three cases. (Guy). Tongue and throat constricted, hot, dry, painful and tense, in nine cases. (Guy.)

Pathology.—Inflammation, sometimes ulceration, and, in rare instances, gangrene of the œsophagus. (44.) Fauces inflamed, and occasionally ulcerated and gangrenous. (44.) Pharynx bright red. Inflammation of the œsophagus in its whole extent, particularly the lower extremity. Dark and somewhat blue color of the lower portion of the œsophagus, and the upper portion of the stomach. Inflammation and erosion of the fauces. (32.)

Clinical Remarks.—Arsenicum is appropriate in pharyngitis, when deglutition is very difficult and painful, with a sense of constriction, heat, burning, and tenseness throughout the entire length of the pharynx; frequent desire to swallow, with much difficulty in accomplishing it, in consequence of a paralytic condition of the pharyngeal muscles; food feels as if passing over a lump, rough, sore, and painful; spasmodic contraction of the muscles of the throat on attempting to swallow, from dryness of the pharynx; pale and anxious expression of the countenance, and a general loss of strength. (10.)

One of the principal remedies in œsophagitis, is Arsenicum. The following are the most characteristic indications for its use: Intense thirst, dryness of the affected part, great pain, burning, and soreness, which renders deglutition almost impossible; nausea, retching, small and feeble pulse, pale, anxious and distorted countenance; symptoms of cerebral congestion; paralytic weakness of the muscles of deglutition; spasms of the œsophagus on attempting to swallow. (10.) Mezezeum often proves more useful than Arsenicum. (11.)

It is a reliable remedy in malignant sore-throat, when the system has become much prostrated. The parts appear livid, ulcerated, and ready to slough, with nausea, vomiting, faintness, thirst, or adipsia, skin hot and dry, or cold and clammy; petechiæ, tongue dark, dry and tremulous, and finally sloughing and gangrenous ulcers, which rapidly extend, and reduce the patient to the last extremity. (10.) Muriatic-acid often acts more promptly and pleasantly than Arsenicum. (11.)

CASE 1.—Mrs. A., a blonde, with a large abdomen, was troubled with inflamed and greatly enlarged tonsils, accompanied with terrible burning pain in the same. Dr. Liedbeck gave Ars., 30, and, in the course of twenty-four hours, she was cured completely. [Hyg. F., 309.] Quoted by Rückert. (26.)

CASE 2.—A man, aged seventy-five, suffering for six months from dysphagia, with the following symptoms: Dryness of the throat, pressure in the œsophagus, severe burning in œsophagus during deglutition, and inability to swallow solid food; fluids he could swallow, but with difficulty. The supposed cause was a neglected inflammation, and consequent hardness and constriction of the œsophagus. Dr. Gross ordered Mez., 15, for five days, two doses to be taken daily; then Ars., 15, in similar doses, which removed the burning in the throat, and enabled him to eat hashed meat, &c. Nine months after that, he died of marasmus-senil. [Allg. H. Ztg., 12, 323.] (26.)

Gastric Symptoms.—Frequent hiccough, with eructations; offensive taste in the mouth; continual eructations at the time when the fever should have set in. Nausea, with great anguish; with fainting tremor, followed by heat and shuddering; nausea, obliging him to lie down in the forenoon, with inclination to vomit, and tearing in the feet; with accumulation of water in the mouth; with water-brash shortly before and after a meal, or while sitting, going off during exercise. Vomiting at night, early in the morning after every meal, and after drinking. Excessive vomiting, with great exertions, followed by extreme exhaustion and aggravation of the pain in the stomach. Bloody discharges by the mouth and rectum. Vomiting, with diarrhœa, immediately after the fainting; copious, watery diarrhœa, when the vomiting ceases. During the vomiting, violent pains in the stomach: internal burning heat and thirst. Soreness in the abdomen, violent screams, apprehension of death, violent colic. (32. 26.)

Pathology.—Inflammation, in some cases ulceration, and in rare instances, gangrene of the stomach. (44.) Stomach distended with air. Contraction of the stomach The outer side of the stomach has a livid appearance. Viscid, fluid, and bloody brown mucus in the stomach. Reddish fluid in the stomach, which adheres to its walls like jelly. The stomach and bowels are deprived of their natural mucus. Spasmodic contraction of the pylorus. Contracted pylorus, which is dotted with livid spots. Uniform pale redness of the inner coating of the stomach, of the extent of a hand, around the cardia, and dotted with a quantity of dingy-white vesicles, which contain a dingy-white, turbid

lymph. Fleishy excrescences around the pylorus. The mucous membrane of the cul-de-sac looks livid, and is softened. The great curvature of the stomach is disposed in oblong folds, the mucous membrane being somewhat congested in various parts. The great curvature of the stomach is dotted with bright red specks. Dark spots in the mucous membrane of the stomach. Inflammation and erosion of the stomach. Parts of the stomach and intestinal canal are inflamed, gangrened, crumbling, dry, and exulcerated. Perforation of the stomach and intestinal canal. Whitish vesicles of the size of a pea, and a number of sphacelated spots in the inner mucous membrane of the stomach. *Peculiar, characteristic, isolated inflammatory process in the stomach and intestinal canal, with exudation, softening, and scurfy formation.* Extravasation of blood, and ecchymosis in the stomach. Blackness of the villous coat, in consequence of extravasation of blood. Enlargement and prominent development of the mucous follicles in the stomach and intestinal canal. The membranes of the stomach are very thin. Softening, or rather exulceration and swelling of the villous coat of the stomach, patches of which can be easily pulled or rubbed off from the subjacent coat with the fingers. Softening and exulceration of the membranes of the stomach; effusion of coagulable lymph on the inner surface of the stomach. The villous coat is sometimes strong and firm. Redness of the villous and peritoneal coats of the stomach, without the villous coat being detached. In some cases of poisoning by Arsenic, no trace of inflammation or disorganization of the stomach is perceptible. (32.)

Arsenic has been employed, for the most part, in severe gastric affections, accompanied by rapidly-failing strength, with nausea, vomiting, thirst, dry and dark tongue, black sordes upon the teeth, pale and sunken countenance, cold extremities, small pulse, burning pains in the stomach, great anxiety and restlessness, constant jactitation, and most of the symptoms worse at night. (10.)

It is frequently indicated in dyspepsia, especially in protracted and obstinate cases. The most prominent symptoms are: General loss of vitality, nausea and vomiting after eating or drinking, burning pain, and oppression in the stomach after eating or drinking; pain and tenderness of the stomach on pressure; intense thirst, or adipsia; dry, dark, or white fur upon the tongue, with red edges, or a silvery whiteness of the tongue; anxiety, depression of spirits, nocturnal jactitation, aversion to food, irritability, petulancy. (10.)

In these maladies, dynamic doses are alone useful. (10.)

In softening and ulceration of the stomach, with their concomitant results, it has been deemed an indispensable remedy. Against the serious train of symptoms which sometimes succeed to hæmatemesis, it is thought to be a remedy of great value. (10.)

Clinical Remarks.—This is a very important remedy in acute and chronic gastritis, and also in dyspepsia. The indications for its use in these diseases, are to be found among the following symptoms: Great prostration of the vital powers; white or reddish-brown tongue,

which may be dry and trembling; ardent desire for cold water, acids and stimulants, with complete aversion to all kinds of food; nausea and vomiting of food, after eating or drinking, with sensation of burning; severe pain at the pit of the stomach, with a feeling of great tension on pressure; sense of weight, as if there were a stone at the stomach: small, frequent, irregular pulse; pale, sunken countenance, with coldness of the extremities. (54.)

Persons with Todd's inflammatory gastric dyspepsia, cannot bear even very small doses. This dyspepsia is characterized by slow and painful digestion, sensation of heat and oppression of the epigastrium, increased by food and pressure; thirst, dryness of the mouth on awaking; sensation of heat and dryness about the eyes; a sharp pulse, rather high-colored urine, unsound, unrefreshing sleep, irritability of temper, more or less lassitude, and costive bowels. *Arsenic causes just such a state.* (46.)

Stomach.—Heat or burning in the stomach and pit of the stomach, with pain and oppression. Oppressive anxiety and excessive anguish in the pit of the stomach, with lamentations and moaning; at night, extending to the upper part of the chest. Gnawing and corrosive sensation in the stomach. Spasmodic pains in the stomach, particularly after eating; *periodical*; excessive, with thirst, with violent colic, diarrhœa, and fainting-fits. Cutting, drawing, tearing, *burning* pain in the stomach, ameliorated mostly by exercise. Pain, as if the stomach were torn to pieces; great painfulness to the touch. Torturing distension, as if occasioned by flatulence, worse after vomiting and a diarrhœic stool. Pressure at the stomach, with weight as of a stone; as if the heart would be pressed out of its position; after a meal, particularly in the region of the cardiac orifice, and in the œsophagus, as if the parts were filled with food up to the mouth, sometimes followed by empty eructations. (32. 26.)

CASE I.—G. H. T., aged twenty years, suffering periodically, for fifteen years, from a condition as described below, and for which he had received unsuccessful allopathic treatment, until he applied to Dr. Stapf, who cured him with one dose of Ars., 30, of the following: Troublesome nausea, sleepiness during the day; after eating, likewise at night and towards morning, violent vomiting of ingesta, bile, and acid fluid, accompanied with great straining and pain in the stomach. After vomiting, violent pain in the pit of the stomach, extending to the umbilicus, with violent burning pain and tenderness of those parts; rumbling in the abdomen; incarcerated flatus and stitches under the floating ribs; coughing, &c., causing an increase of pain. Frequent diarrhœic stools, of a greenish, slimy appearance; tenesmus and burning pain at the anus. Burning pain in the pit of the stomach, comes on during rest in bed, continuing during the night. Frightful dreams, with frequent starting from sleep, with great anguish in the chest, followed by sleeplessness and extreme uneasiness. Almost constant coryza and bleeding at the nose; pressure over the eyes; want of

appetite; food has no taste, and acidity of the stomach. During an attack, he is melancholy, disposed to cry, and timid; his face is pale, œdematous, and strength prostrated. (21. 26.)

CASE 2.—Mrs. Ewig zu Sehld, aged twenty-five, without children, suffering from almost constant distress, nausea, and periods of vomiting, of three to eight days' duration, and burning, pressing pain in the region of the stomach, sometimes with pressing-throbbing headache. Dr. Elwert gave her Ars., 25, four doses, one dose every fifth day, after which she expressed herself completely cured. (21. 26.)

CASE 3.—Mrs. B., aged fifty-two, for three years past suffering from the following: (Ulcer of the stomach?) daily vomiting, from five to twelve times, of a blackish-brown, tar-like fluid; constipated bowels; fever; in alternation with shaking chills; body emaciated; ashy-colored complexion, and prostration of strength. A few doses of Ars., 30, prescribed by Dr. J. E. V., restored the health of the patient. (21. 26.)

CASE 4.—A woman, aged fifty-three, constantly complaining of pinching, gnawing-burning pain in the stomach, vomiting of everything she takes, accompanied with great straining and distress. Dr. Bähr gave her Ars., 4, a dose at night and in the morning, which stopped the vomiting; but, six weeks afterwards, she died of cancer of the stomach, corroborated by *post-mortem*. (81. 26.)

CASE 5.—A man, aged twenty-nine, formerly always healthy, was suffering for three months with gradually increasing symptoms, as follows: Loneliness of spirits, avoiding company and business, contrary to his usual disposition; stupefying headache, mostly in the temporal region; vertigo; want of appetite; fullness, distention of the abdomen and stomach, after eating ever so little; constipation of the bowels, sometimes passing fæces of very black appearance, and nausea mostly in the morning. Yesterday morning, vomiting of about two pounds of dark red blood, accompanied with great anguish, tremor of the body, and fainting. The next night, a similar attack, with two blackish stools; an hour or two later, again vomiting of nearly two pounds of more red-looking blood, followed by great prostration, deathly paleness of the face, with icy coldness of the body, roaring, buzzing in the ears, obscuration of sight, and some dry cough. Dr. Heichelheim (Hyg., 9, 339,) gave Nux, 6, without any apparent benefit; but Ars., 6, of which five doses were prescribed, with a steady improvement of the patient's condition until the eighteenth day, when he expressed himself as being cured—having received no other remedies, except three intercurrent doses of Sulph., 6, for flatulence and constipation of the bowels. (26.)

CASE 6.—A single woman, aged thirty, of frail and badly-nourished body, was taken with *hæmatemesis*, in consequence of severe bodily exertion, with the following symptoms: The evening previous to the attack, burning in the stomach, nausea, with pressing dull pain in the forehead, stitches in the region of the spleen, followed by cold clammy sweat, and sudden vomiting of a large quantity of partly coagulated and partly dark fluid blood, which occurred in two paroxysms. Dr.

Rupprich, who was called in, found the patient in bed, utterly prostrate, of waxy appearance, with constant nausea and frequent fainting-fits, much thirst, and body cold. Ars., 15, of which a few doses were given, and on the fourth day after the attack, the patient was able to leave her room. [*Allg. H. Ztg.*, 29, 144.] (26.)

CASE 7.—A young lady, aged eighteen years, of a pale appearance, and a calm, tranquil temperament, was taken with violent hæmatemesis. She had never before been suffering from gastric or abdominal derangement. A few days before the present attack, she was complaining of a tired feeling in her limbs and body generally, occasional shiverings and feeling of congestion, pressure and spasmodic contraction of the stomach, especially after eating, with distention of the abdomen, after which hæmatemesis took place. On the first day, in the afternoon, she had two attacks of vomiting of a large quantity of blood, with fits of fainting before and after each paroxysm. On the second day, nausea, heat, feeling of congestion, uneasiness in the stomach, rising of a clot of blood, tremor and twitching of the body, with renewed vomiting of blood. On the third day, there was a similar condition as on the day previous, with a prolonged state of asphyxia. Dr. Schelling (*Hyg.*, 16, 47,) ordered Ars., 2, in repeated doses, under which she was restored in a few days to her usual state of health. (26.)

CASE 8.—Miss B., aged twenty-two years, subject to gastric derangements, and subject to vertigo when dancing. On one occasion, while taken with nausea and pressure in the stomach, an allopathic physician ordered Aloes, but soon after having taken it, she was taken with profuse vomiting of dark blood. Dr. Kirsh, a homœopathic physician, was called in, and found the patient in the following condition: Being in bed, with distorted, pale and cold face, extremities icy cold, thread-like pulse, distention of the abdomen; great anguish and distress in the stomach; pressure and heaviness of the head; nausea, and several times vomiting of blood, at first as black as tar, and then in lumps, with fainting and great prostration. Ars., 25, was given in repeated doses, and, in the course of three days, a cure was effected. It also is stated that she was able to indulge in dancing, without getting dizzy as before. [*Hyg.*, 8, 27.] (26.)

CASE 9.—Mrs. S, about sixty years of age, and of plethoric habitus, having been subject to hæmatemesis several times, was taken as follows: Repeated vomiting of dark venous blood, followed by fainting, great prostration, constant nausea, violent throbbing in the chest, coldness of the body, pale face, stertorous, sighing respiration. China, 18, was given for three days, with only temporary benefit. Super-added to the above condition, was a violent burning in the stomach, nausea on the slightest motion, worse during the night, black stools, sometimes bloody. Dr. Hartmann then prescribed Ars., 30, after which most of the above symptoms disappeared in a few days, with the exception of a few, for which Calcar. and Carbo-veg. were successfully administered. [*Hartm. Therap.*, 2, 183.] (26.)

Clinical Remarks.—In many cases of dyspepsia, its efficacy has

been abundantly proved. A case marked by the following symptoms, was rapidly and entirely cured by Arsenic, 30: Drowsiness, nausea, violent vomiting after food, accompanied by bile and an acid fluid, and violent pain in the stomach. Heat, rumbling, and distress in the stomach, and frequent diarrhœa. These symptoms had endured for fifteen years, and Stapf says they yielded to one dose of the thirtieth of Arsenic. (12. 46.)

The relation between the effects of Arsenic and some of the morbid conditions of the stomach described by Dr. Chambers, in his "Digestion and its Derangements," are very striking, and undoubtedly point to its efficacy in such affections. Thus, he says, we often find in the glands of the stomach black pigment, which is the *débris* of altered hæmatin, showing that congestion had formerly existed in the part; and small dark-red specks of obstructed capillaries, when it is more recent. By these means, several variations in color arise. This corresponds very well with morbid appearances produced by Arsenic. (47. 46.)

The frequency of *degeneration of the glandular structure of the stomach is very great*. In one hundred cases collected by Dr. Jones, seventy-seven exhibited this form of atrophy, and in fourteen, the destruction of tubes was very great; we may say that twenty-three per-cent. were in perfect condition, sixty-three per-cent. not likely to interfere with health, and fourteen per-cent. unequal to their required duties. (47. 46.)

It is singular that this glandular degeneration is not more common in the case of dram-drinkers than in temperate people; but, as a rule, the former have less the matter with their gastric glands than the temperate. (47. 46.)

The *symptoms* of degeneration of the gastric glands are much more of a negative than of a positive character. The lesion is but little, if at all marked by any sensations in the stomach itself. This is just what might be expected from the phenomena of analogous conditions in other organs. We do not discover Bright's kidney from the sensations of the loins, or fatty hearts from pain in the cardiac region; even softening of the bones itself produces no pain in the yielding skeleton, till actual fracture takes place. (47. 46.)

It is only when the glandular layer is utterly destroyed, that gastric symptoms, specially so called, are produced. This was the case in a respectable sober bricklayer, aged about fifty. He had been, for years, troubled with vomiting, generally occurring an hour or two after a meal, preceded by a sense of weight, without pain, in the epigastrium. Latterly, he had been unable to keep any solid food on his stomach, and but little liquid, and was extremely reduced. Examination and *pressure* were borne without pain. Death here seemed to follow directly on the disordered functions of the stomach. It was found, *post-mortem*, with scarce a trace of tubular structure. (47. 46.)

Probably the reason for the presence or absence of gastric symptoms, lies not so much in the degree, as in the extent of the degeneration. (47. 46.)

In these cases, however, Chambers says, there is a want of power to resist injuries, and a disappointing inability to profit by nutriments, stimulants, or drugs, in a degree proportioned to the dose, and alarming symptoms supervene much sooner than was to have been expected. These are the cases which disappoint friends so much by not *rallying* when the illness has in reality been slight. (47. 46.)

As regards treatment, though we may not restore the destroyed tissue, though that even may take place, we may at least try to preserve what remains. There is *an arrest of metamorphosis*, and the indications are to remove effete tissue and produce the supply of new. No treatment in Bright's disease is more efficacious than that which combines alteratives with those restorers of blood, Iron and animal food. Those derive most advantage who are able to continue taking Mercurius without salivation; those next who can take Mercurius-corrosivus, and those next who can only bear neutral salts, Iodide of Potassium, and water. Iron has proved more efficacious when given at the same time, animal food being at the same time digested. This cannot but be equally applicable to one form of degeneration as another; only that, in gastric degeneration, one would be careful to select drugs which act specially upon the stomach, such as Mercurius-corrosivus or Arsenicum, whose most potent effects we know to be chiefly manifested in that organ. (47. 46.)

Rapidly perforating *ulcers* of the stomach are very frequently found in young females, and this is equally true of ulcerations of other parts of the intestines. All ulcers tend to penetrate the peritoneum more in youth than in declining years. If the ulcer has existed but a short time, the edges are sharp, as if a hole had been punched out of the membrane. If it be chronic, the edges are thick and raised, and the membrane around thickened. The most common situation is the lesser curvature of the stomach, more usually near the pylorus. (47. 46.)

As regards the chances of perforation in simple ulcer or in malignant disease, in St. George's Hospital there died thirty-four cases of malignant disease of the stomach, with three perforations; there were nineteen cases of simple ulcer, and nine of them with perforation. Perforation, therefore, is the most natural end of ulceration of the stomach, if it runs its full course. When treating these cases, one actually shudders at the thought that there is but a piece of gold-beater's skin between the invalid and death. (47. 46.)

As regards the symptoms, in many cases they are extremely vague; in others, again, well marked. Pain, however, more or less, is almost always present. There may or may not be local symptoms referrible to the stomach; but, even when pain is present, it does not always correspond to the seat of the ulcer after death. The pain felt after eating or drinking, is most marked when the aliments are of higher temperature than the body. They can oftener be borne when of a low temperature. It is much increased by motion. It generally begins within a quarter of an hour after eating. The pain of an ulcer in the stomach is always increased by pressure. Arsenicum and

Opium are very useful in perforating ulcers, quite as much so as against some ulcerations on external parts of the body. (47. 46.)

The following cases are probably translated from Rückert's "Clinique:"

CASE 1.—A case of *gastritis-mucosa*, in a child nine months old, with the following symptoms: Diarrhœa, with some fever; discharges from the bowels of a foul odor; distended abdomen, with increased temperature of the same, and painful to the touch, especially in the gastric region. On the second day, vomiting of watery, slimy substances, continuing to the third day, with increase of diarrhœa and great prostration, restlessness, hippocratic face, nose sharp, with bluish color about the eyes and lips, wiry pulse, and sighing respiration. Under the use of Ars., 5, (Resem., 3, 159, Bicking,) the child recovered in the course of a few days. (26.)

CASE 2.—Mrs. D., aged twenty-two years, lately married, of strong constitution, blue eyes, light-brown hair, even temperament, and of regular menstruation, had been suffering for some time from the following: Pain in the stomach, nausea, vomiting, generally in the morning after the use of milk, beer, coffee, and acids. After dinner, cramp-like burning-pressing pain in the stomach, twinging pain in the umbilical region, and stitches through the sides of the abdomen; and, several hours later, cessation of pain; almost constant cold feeling in the stomach; hunger without appetite; bitter taste of everything she takes; bitter and sour taste in the mouth; tongue red and very sensitive, with much thirst; roughness of the throat, with accumulation of mucus. Stool every second day, of very light color, with burning pain of the anus; urine turbid, with frequent inclination to pass it; leucorrhœa, acrid coryza, restless dreams, sudden starting from sleep, uneasiness of the limbs, paleness and coldness of the face, irritable mood. Dr. Messerschmidt ordered a few doses of Ars., 32, (*Hufel. Journ*, 55, 1, 47,) and, in consequence, a cure was effected within two weeks. (26.)

CASE 3.—A maiden lady, who had been suffering for several years, every few days, with pain in the stomach, was cured by Ars., 18. [*Diez*, 184.] (26.)

CASE 4.—A married lady, aged twenty-five years, without children, of irritable disposition, was suffering from the following: Long-continued nausea, with periodical vomiting, accompanied with much distress, and pressing, burning, throbbing pain in the region of the stomach, sometimes palpitation of the heart, with pressing-throbbing headache. Dr. Elwert ordered four doses of Ars., 25, one dose to be taken every fifth day, which effected a cure—except of nausea just previous to the appearance of her menses, for which three doses of Puls., 15, were given, with the desired effect. [*Allg. H. Ztg.*, 8, 69.] (26.)

There are still seventeen cases more, of a similar character as those above described, in Rückert's "Klinische Erfahrungen," reported and cured by Arsenic, corroborating the truths of the proving by clinical facts. (26.)

The following morbid condition, assimilating the character of lead-colic in two cases, were both cured by Arsenic, thirtieth and fortieth dilution, with symptoms as follows: Violent colicky pain, day and night, only ceasing a short time at intervals; obstinate constipation of the bowels; appetite diminished; vomiting of clear water; retraction of the abdomen; thirst; chilliness, great prostration, indifference, and depression. [Allg. Hom. Ztg., 2, 105., Ng.] (26.)

Abdomen.—Violent *burning* pain in the whole of the abdomen. Induration of the liver. Numbness, from the left hypochondrium across the stomach. Swelling and painfulness of the spleen. Excessive colic, with violent anguish in the abdomen. Distended hard abdomen. Cutting colic, with coldness; or internal heat and thirst, with vomiting, feeling of weight in the abdomen, and diarrhœa. Spasmodic colic. Tearing in the abdomen. Nightly jerking pains in the abdomen. Hysteric abdominal spasms. Periodical colic. Swelling and induration of the mesenteric glands. [?] Soft swelling of the abdomen, which is painful to the touch. Ascites. Painful swelling of the inguinal glands. Pains, accompanied with great anguish, lamentations, tossing about. Internal restlessness, which does not allow one to lie still. Despair of one's life. Gnawing pains in the abdomen. Tearing in the abdomen, with icy coldness of the hands and feet, and cold sweat in the face. Uneasiness in the abdomen, with fever and thirst. Rumbling of flatulence, passing upward, causing eructations. Burning or stitches in the inguinal regions. Ulcers above the umbilicus. (32. 26.) Bloating of the abdomen. Pulsation in the umbilicus. Numbness and sensation of paralysis in the right lumbar region, extending from the vertebræ to the crest of the ileum. After waking in the morning, at six o'clock, distressing, lancinating, griping pain in the bowels; afterwards, one sharp, burning, watery stool, relieving the abdominal pain, but leaving much debility. He falls asleep, sitting on a chair, and has no appetite. Pulse 60, and fuller than in health. (67.)

Pathology.—"The alterations observed in the condition of the intestinal canal vary with the quantity of the poison taken, and probably with other circumstances, but they are all indicative of inflammation: thus, we have redness as one symptom, sometimes accompanied with extravasations of blood into the tissue of the canal; ulceration is also frequently observed, sometimes softening of the mucous coat, effusion, (of lymph or blood,) and occasionally even of gangrenous spots." (3.) The vessels of the intestinal canal, omentum, and particularly the arteries are turgid with stagnant blood. The veins of the abdomen are particularly congested with a quantity of black, fluid, and sometimes flocculent blood. The intestines are collapsed and thin, or else contracted and large, all the vessels, even to the minutest ramifications, being filled with black blood. The lesser intestines are distended with air. The smaller intestines are dotted with ash-colored spots. The outer surface of the jejunum and ileum, and the mesenterium are inflamed. Volvulus. Considerable thickening

convolution and hardness of the intestines, particularly of the lesser, portions of which are deprived of their mucus and constricted. Signs of inflammation in the whole track of the intestinal canal. Redness of the mucous membrane of the jejunum and ileum. Inflammation of a large portion of the intestinal canal, which is covered with black spots. Purple redness of the duodenum, softening and thickening of the coats of the duodenum, portions of which are deprived of the mucous and muscular coat. Redness and ulceration of the duodenum, and of other portions of the intestinal canal, particularly the rectum. The duodenum is considerably tinged with bile. Several ulcers of the size of a lentil in the cæcum, towards the side of the mesocolon, reaching a little above the level of the mucous membrane, and surrounded by a bright red, narrow, circular border. Reddish-black appearance of the colon, and of a portion of the rest of the bowels. The ileum is sphacelated to the extent of one yard from the ileo-cæcal valve. The larger intestines are generally sound, with the exception of a quantity of mucus, which is lodged in every part of them. Considerable redness, inflammation, and exulceration of the rectum. (32.)

Clinical Remarks.—The specific influence of Arsenic upon the intestinal canal is strongly marked. Inflammation, ulceration, softening, and even gangrene have repeatedly been observed as effects of toxic doses.

One of the most important homœopathic applications of this substance is in abdominal typhus. According to Louis and Chomel, the lesion which characterizes typhoid fever, and belongs only to it, consists in a papulous red swelling of Peyer's glands, and the follicles of Brunner, followed by ulceration. "The large intestine is generally sound, with the exception of the cæcum, which is usually covered with a confluent eruption. But this intestine is almost always distended with gas in this fever. This special inflammation of the follicles, this typhoid exanthema, is produced with the fever, and persists as long as it lasts." Andral has in vain endeavored to find this exanthema as an attendant of other acute diseases. Pressure over the right iliac fossa produces a pain which causes the patient to wince, even when in state of a semi-stupor, thus showing the serious nature of the lesion.

If we consult the pathogenesis and pathology of Arsenicum, its homœopathicity to the second and third stages of this malady will be clearly apparent. Not only is this resemblance manifested in the abdominal symptoms, but in the alteration of the blood, which, in both instances, becomes decomposed.

In Dr. Fleischmann's homœopathic hospital, at Vienna, Arsenicum is the chief remedy employed, in nine cases out of ten of abdominal typhus. In the early stage of the disease, a few doses of the fourth to the sixth decimal dilution of Bryonia are prescribed; after which Arsenicum, at the fourth to the sixth dilutions, are relied on, until the cure is completed.

Dr. Hausmann, of Vienna, thus writes upon this subject: "Arseni-

cal ileo-typhus and the abdominal typhus are, in relation to the anatomical and physiological phenomena, two morbid states remarkably similar. Arsenicum, which produces arsenical ileo-typhus, cures abdominal typhus.

"At the Hospital of the Sisters of Mercy, at Vienna, they received, in 1841, one hundred and sixty-seven cases, which were treated with this remedy in homœopathic doses. There were one hundred and fifty-six cured." (12. 10.)

Dr. Hausmann also alludes to the cerebral symptoms produced by Arsenicum, and points out their similarity to those of typhoid fever. (12. 10.)

During the course of malignant cases of scarlet fever, a condition of the intestines sometimes obtains somewhat similar to that of abdominal typhus. Peyer's plates and Brunner's follicles, as well as the mucous membrane of the small intestines, become irritated, and occasionally ulcerated and gangrenous, with distention of the large intestines with gas, great tenderness of the abdomen on pressure, diarrhœa, general prostration, faintness after each discharge from the bowels, cerebral disturbance, and evident signs of decomposition of the blood. Under such circumstances, Arsenicum, aided, perhaps, by an occasional dose of Ammonium-carbonicum, are our most reliable remedies. (12. 10.)

In certain stages of Asiatic cholera, it is universally regarded as a remedy of importance, although post-mortem examinations have not, as yet, revealed intestinal lesions which bear so close a resemblance to those of Arsenicum as are found in the diseases just alluded to. But, as other phenomena correspond, and as the drug does not uniformly give rise to inflammation, ulceration, or other intestinal lesion, the homœopathic relation, in many cases, may yet be sufficiently complete to constitute it the appropriate remedy. (10.)

Hartmann ("Acute Diseases," vol. i., p. 232) asserts, that "the principal specific in typhus, especially in a well-marked typhus-abdominalis and putridus, is Arsenic. Diseases of the mucous membranes, which have developed themselves out of gastric, bilious, and mucous fevers, constitute the greater part of the curative sphere of Arsenic. Diseases with intermittent type likewise correspond to Arsenic; and this is another reason why Arsenic is a great remedy in typhus, with well-marked exacerbations."

In advanced stages of yellow fever, with sinking of the vital energies, intense thirst, excessive restlessness and jactitation, anxious, sunken, and sallow countenance, great debility, and other symptoms which are apt to precede and accompany the dreaded "black vomit," Dr. A. Leon, and other practitioners, have found Arsenic a remedy of immense power. (10.)

Many cures of abdominal dropsy are reported, in individuals whose constitutions have become seriously impaired, from dissipation, disease, and exposure to deleterious influences. In nearly all of these instances, the medicine has only been employed successfully in attenuations above the second. (10.)

Phosphoric-acid should not be forgotten in the first stage of typhoid fever; and, when ulceration of the bowels has set in, with or without hæmorrhage, the Nitric and Muriatic-acids will form more reliable remedies than Arsenicum. In those dreadful and often fatal cases of hæmorrhage of the bowels, injections of dilute Nitric-acid, aided by the same remedy, given by the mouth, will often save life. In the cerebral affections of typhus fever, Opium is one of the most useful remedies. Opium and Arsenicum, given in alternation, will control many cases of typhoid, without resort to other remedies. Arsenicum is more homœopathic to general dropsy than to simple abdominal dropsy or ascites. The larger proportion of cases of true chronic abdominal dropsy arise from cirrhosis of the liver, which Arsenicum, and perhaps most other remedies are powerless to relieve. Perhaps Kali-hydriodicum and Ammonium-muriaticum act more powerfully in removing the chronic thickening of Glisson's capsule, which attends cirrhosis of the liver and chronic abdominal dropsy, than any other remedies. Thickening of Glisson's capsule is comparable to the thickening of the tissues which cause organic strictures of the urethra, and Dr. Theelman, surgeon of one of the hospitals of St. Petersburg, has utterly relinquished, for the last thirteen years, the use of the mechanical means habitually employed for organic strictures of the urethra, which he treats exclusively with Iodide of Potassium. He has perfectly succeeded in twenty-seven cases (see *Am. Med. Monthly*, March, 1859, p. 232). In Germany, the Ammonium-muriaticum is in much repute as a therapeutic agent in hepatic ascites, and Kali-hydriodicum, on the authority of Watson, is held by some physicians to be especially serviceable in the same disease. Arsenicum is perhaps most homœopathic to *active* abdominal dropsy, or ascites, in which, according to Watson, we sometimes see persons, who were previously in good health, become rapidly ascitic after exposure to cold and wet, and rapidly recover again under the remedies that are used to subdue inflammation. The balance of the circulation between the skin and the internal surfaces appears to be destroyed on these occasions, by the operation of external cold upon the tegumentary membranes, and the dropsy arises from the detention in the blood, or from the absorption into the blood of an undue quantity of watery fluid, and its subsequent discharge, by a kind of secretion, into the shut cavity of the abdomen. (11.)

Hypochondria.—Induration of the liver; pressing sensation in the liver. Swelling and painfulness of the liver (in fever). Swelling and painfulness of the spleen (in fever). Lancinations in the left hypochondrium, in the evening, when in bed. Inflammation of the spleen. (32. 26.)

Pathology.—The liver is always found turgid with blood. Liver black as a coal, dark blue, turgid with blood. Large, pale, tough liver. Crumbling liver. The gall-bladder is filled with bile. The spleen is filled with blood, crumbling, dissolving readily. Inflammation of the pancreas. (32.)

Clinical Remarks.—It has been prescribed, with some benefit, in certain cases of cirrhosis of the liver; also in indurations and enlargements of the liver and spleen, accompanying intermittent fevers. In organic diseases of the liver, causing dropsical effusions, it is also considered a remedy of value. (10.)

Small ("Manual Hom. Prac.," p. 295) writes, that "Arsenicum is indicated when there is inflammation of the spleen, accompanying the ague, and also when the patient complains of violent burning pain in the region of the spleen, and a constant pulsation at the cardiac portion of the stomach, attended with great anxiety; also vomiting a dark-colored fluid; watery or sanguineous diarrhœa, and burning at the anus; excessive weakness and swelling of the feet." (10.)

Stool and Anus.—Hard, knotty stool. Alternate constipation and diarrhœa. Fruitless urging to stool. Spasmodic protrusion of the rectum. Burning and pain in the rectum and anus, with constant tenesmus, or discharges of watery, yellow, bloody, slimy, green, tough, bilious, blackish, or foul substance, or involuntary stool. *Before stool:* Restlessness, pain in the bowels, and feeling as though the abdomen would burst. *During stool:* Vomiting, excessive pinching in the bowels, burning in the rectum, tenesmus. *After stool:* Burning in the rectum and anus, palpitation of the heart, tremor of the limbs, great prostration. Independent of stool: Itching, burning, and soreness of the rectum. Burning pain in hæmorrhoids, at night. Painful swelling of the hæmorrhoidal veins. (21. 26.) Constipation, with pains in the abdomen. Diarrhœa at night, or renewed after eating or drinking; violent, with frequent discharges; with tenesmus, with colic, with vomiting, with great weakness, with thirst, and alternating with constipation. Dysenteric diarrhœa. (32.) Of three hundred and twenty cases of arsenic-poisoning, reported by Dr. Fowler, relaxed bowels occurred in one-third of them. In Dr. Guy's twenty-five cases, diarrhœa was present in eleven, excessive in seven, absent in four. The matters passed by stool consisted, in three cases, of blood, and, in two, of matter resembling green paint. Pain was present in nineteen, absent in one, and in two it subsided after a short time. (44. 10.)

Clinical Remarks. **CHOLERA.**—Dr. Welper, of Berlin, relates that a stout healthy man, who, in the forenoon, had freely and for some time exposed himself to the inhalation of the steam from a vessel in which he was boiling several ounces of orpiment in water, was attacked, at night, with sickness, and, next morning, with extreme weakness and difficulty of breathing. These symptoms were greatly relieved by an emetic. But, towards evening, the extremities became icy cold and very stiff; the breathing much oppressed; the pulse very hurried, and imperceptible, except in the neck; the mouth and throat dry, and the tongue rigid; but the mind remained clear, though anxious, and afraid of impending dissolution. His state of collapse was removed in twelve hours, by fomentations, and, in no long time, he re-

covered entirely, except from the dyspnœa, which continued more or less till a few years afterwards, when he died of hydrothorax. Dr. Christison speaks of it as an extraordinary case, closely allied, in its symptoms, to malignant cholera in its early stage. (9. 46.)

Mr. Black, a physician of the opposite school, has lately been advocating, in the *London Lancet*, the *specific treatment* of cholera by Arsenic.

CASE 1.—J. P., aged forty-two, by trade a master potter, was seized with violent vomiting and purging, accompanied by frequently recurring pains in the abdomen and by general collapse. The dejections were somewhat thin, watery, offensive in odor, and contained a moderate proportion of bile. The vomits consisted of food previously taken, with a certain admixture of a thin mucoid fluid. (46.)

For these symptoms he had Lead and Opium, chalk-mixture with Catechu, friction, the application of heat to the extremities, sinapisms, and Turpentine stupes to the abdomen, and weak cold brandy and water to drink. In despite of all this, the symptoms increased. The following morning, he was in the greatest collapse: Countenance pale, livid, and leaden; eyes glassy and sunken; nose nipped; tongue pale, and besmeared with thin mucus; breath cold; great thirst; skin cold and soddened, with clammy perspiration; voice reduced and squeaking; pulse thready, running, and incapable of being numbered. The dejections were involuntary and almost constant, left little or no stain upon the bed-linen, of a faint sickly odor, and evidently serous. The vomits were frequent, and of a thin, pale, sero-mucoid fluid; cramps were powerful and agonizing.

Gave immediately six drops of the Arsenical solution, repeating the dose in ten and in twenty minutes. This arrested the urgent symptoms, and in two days the man left his bed. The Arsenic continued to be repeated, in three-drop doses, in increasing intervals of one to three hours.

Dr. Black winds up by saying, "To destroy a poison in the blood, I gave to the blood a poison, which acted in accordance with a well-known physiological law, and cured the disease.

He has repeated the treatment with invariable success; and he therefore maintained the *specific action* of Arsenic in the worst forms of English and, *ergo*, of Asiatic cholera. (46.)

It is considered to be useful in hæmorrhoids, with ulceration of the rectum. (11. 54.)

In Dysentery.—Dr. Erhardt states, that in two cases of dysentery putrida, in which the evacuations, and even the urine smelt putrid, and were passed involuntarily, with complete exhaustion of strength, great stupor and indifference, petechiæ, and occasional complaint of burning in the belly, Arsenic alone cured one case, and the other in alternation with China. (12. 46.)

In neglected diarrhœa, during the first period of dentition in children, when they have daily five or six evacuations of brown, watery matter, lose appetite, and waste away to a skeleton, with sallow skin, swelled

belly, and pinched countenance, Arsenic is useful; and, in several cases, the cure was completed with one dose alone. (12. 46.)

In malignant, and other bad forms of dysentery, it is often indicated. Thus, great reduction of strength, sunken, cadaverous, and stupid countenance, hæmorrhages, aphthæ, petechiæ, fætid breath, great jactitation, hot and dry skin, thirst, blue spots, and serous vesicles upon the skin, offensive and turbid urine, involuntary and offensive stools, stupid and soporous, or anxious and depressed state of mind, all point to Arsenicum as the appropriate medicine. Our literature abounds with reports of cures of this form of disease with the drug under consideration. (10.)

Hartmann commends Arsenicum in prolapsus of the rectum, occasioned by neuralgia of the part, and accompanied with burning and itching in the rectum. (10.)

The same author also advises it in hæmorrhoids, with bloody discharges, burning pain in the swellings, and great prostration and debility. (10.)

Dr. Bauer, of Cincinnati, and other physicians, have cured cancers of the rectum with Arsenicum and Carbo-vegetabilis. (10.)

It is appropriate in *fistula in ano*, where there is much smarting and burning in the sore, increased by walking, with ichorous discharge, great debility and emaciation, and a tendency towards a hectic condition. (10.)

Much benefit has occasionally been derived from it in diarrhœas proceeding from ulceration of the small intestines, and an irritation of the mesenteric glands. The symptoms usually are, tenderness of the bowels on pressure, burning pains, especially in the region of the ileum and cœcum, discharges of slimy, bloody, or bilious matters, sometimes alternating with constipation, great thirst and dryness of the mouth, general debility, inability to take food, without causing distress and an aggravation of the symptoms. In such cases, we have found rarely-repeated doses of the thirtieth decimal dilution an exceedingly efficient remedy. (10.)

The following cases are probably translated from "Rückert's Clinique." Arsenic has been used with success by Dr. Seidel, (Archiv. f. h. Heilk., XII., 140) in several cases of diarrhœa occurring during the fall season; with violent burning pain in the umbilical region, before and during stool, consisting only of small passages of slime; nausea, considerable thirst; chilliness, although covered with perspiration; great anguish, constant tossing about in bed, and prostration; the stools occurred mostly from midnight until early in the morning. (26.)

Two cases of dysenteria-putrida, reported by Dr. Ehrhardt, (Archiv. f. h. Heilk., XVIII., 50) with putrid-smelling, involuntary stools and urine; great prostration of strength; indifference; also petechiæ, with occasional complaint of burning pain in the abdomen. One of these cases was cured by Arsenic alone, and the other with China in alternation. (26.)

Several cases of chronic diarrhœa, during dentition, are reported by Dr. Schrön, (Allg. H. Z., v. 153.) *Atrophia-infantum*, with five or six discharges daily, of the appearance of thin coffee-grounds; yellow, ashy-colored skin; great emaciation; no appetite; profuse discharge of urine, tumid abdomen; hypocratic face. Cured in one to three weeks by Arsenic, mostly of the thirtieth dilution. (26.)

CASE 1.—L. Z., a man aged forty years, was treated five days for a fever and constipation, by an allopathic surgeon, but so unsuccessfully that he abandoned his patient and left him to the tender mercy of others. A few days more thus elapsed, and the condition of the patient growing worse daily, the relatives then sent for the homœopathic physician, Dr. M., who found him, on entering the room, screaming frantically with pain; his look wild, the eyes in constant motion, violently talking, now being at the head, and then slipping down to the foot of the bed; constant hiccough; distended, hard abdomen, and at times rumbling in the bowels. He had had about fifty small slimy stools in twenty-four hours, with violent burning at the anus, generally continuing until the next stool, and he had drunk from six to eight quarts of water during that time. On leaving the bed to go to stool, he would frequently sink down prostrated before reaching the place, with great anguish about the chest; and he had been without sleep for four nights and days. He was cured in nine days by Arsenic, thirty-sixth dilution. [Msch. K. Annal., 1, 268.] (26.)

CASE 2.—J. G. David, soldier, aged twenty-four years, tall, strongly built, of sanguine temperament, was taken during the night (in August) with terrible cutting pain in the bowels and frequent watery stools. The next day, at noon, he tried to go on duty, but sank down prostrated, his body covered with cold, clammy sweat. Towards evening, Dr. Seidel found the patient in bed, drawn up in a heap; with confused head, bluish lips, painful expression of the face; no appetite; nausea, especially on motion; violent tearing and cutting pain above the umbilicus; abdomen distended, soft, but painful on touching it; very frequent small, slimy stools, with increased pain in the abdomen, and bearing down in the rectum; violent thirst; dry white tongue; great anguish, and cold extremities and face. One powder of Arsenic, 30, effected the cure. [Annal., III., 16.] (26.)

CASE 3.—A boy, two years old, always healthy up to the present time, was taken with diarrhœa, in January, without any apparent cause; discharges mostly at night, with tenesmus and constant thirst; vomiting of every thing he took, and excoriation at the anus. Three days afterwards, Dr. H. found him more like a corpse than a living being, in a state of extreme prostration; lips and tongue very dry; sunken eyes, without expression; nose pointed; head, face, and extremities covered with a cold, clammy perspiration; almost pulseless; vomiting, accompanied with great straining. The patient received two doses of Arsenic, 40, which affected a cure in two days. [Arch. f. hom. H., II., 3, s. 37.] (26.)

CASE 4.—During the prevalence of a dysentery-epidemic in Septem-

ber, 1834, Dr. Y. was called in to see a girl, aged ten years, who had already been ailing for thirteen days, during which time she had received allopathic treatment without benefit. Her present condition was as follows. Body extremely emaciated; the face pale as a corpse, with sunken cheeks and eyes; look vacant; the expression of the face denoting extreme anguish; lips blue and cold; tongue dry, and covered with a brown layer; insatiable thirst, abdomen tender to the touch; stool almost every five minutes, of a thin, brown slime, mixed with blood; cutting pain in the abdomen; tenesmus, and occasionally fainting; extremities cold; shrivelled and dry skin; almost without pulse; sleeplessness, and extreme prostration. She received Arsenic, 30, and Merc.-corr., 4, in alternation, which restored her completely in thirteen days. [*Hom. Bekehrungsepisteln*, s. 118, 119.] (26)

Urinary Organs.—Frequent urging to urinate, with burning; discharge of urine increased in quantity. (21.) Paralysis of the bladder. Hæmaturia. Suppression of urine. Difficult, painful micturition. (32. 26.) Turbid urine, which deposits a dirty sediment, and looks like clay. (32.) Urine scanty, acid, and high-colored. (44.)

It is no matter of surprise that a remedy, which takes such deep hold of the organism as this, should act specifically also upon the kidneys. The physiological proofs of this action are to be found in the numerous cases of chronic poisoning, in every form and shape. Renal colic; pains in the lumbar region, extending towards the bladder; then urging, with tenesmus; painful, burning urination; involuntary discharge. The quantity of urine is sometimes increased, sometimes diminished; the urethra itself fiery red, then blood-red, bloody, troubled, purulent.

The symptoms are sustained by the results of pathological anatomy, which show great congestion of the kidneys; thickish, cloudy, pus-like urine in the renal pelves, and the bladder empty, or containing a few drops of whitish urine. (67.)

Duration of Action of the Remedies.—M. Bonjean relates the following case and experiments in relation to this subject: "M. X., on his way to the baths of Aix, in Savoy, called upon M. Bonjean, on the 24th of May, 1844, with a prescription, signed by Dr. Cazenave, physician to the Hospital St. Louis, at Paris, and containing Arsenic as its active ingredient. This medicine was taken from May 26 to June 18, during which time the patient swallowed three-quarters of a grain of Arseniate of Soda—equal to about half a grain of Arsenic-acid, or nearly a third of a grain of metallic Arsenic. On the 19th of July following, or exactly a month after he had ceased to take the Arsenical preparation, M. X. forwarded to M. Bonjean a pound of urine, passed the previous evening. From this urine were obtained, by means of Marsh's apparatus, *twelve particles*, of a clear reddish-brown color, brilliant and shining, and which, on analysis, exhibited all the reactions peculiar to *metallic Arsenic*. Every precaution was taken to avoid error. Thus it would appear that, after the lapse of a

whole month, the organs of an adult had not got rid of three-quarters of a grain of Arseniate of Soda, taken in the course of twenty-four days. M. Bonjean believes that this fact may be adduced in confirmation of the principle that the absorption of remedies is the more complete the smaller the dose in which they are administered, and he states the following experiments on his own person in further support of that principle. After taking, in the course of a day, in doses of a glass every two hours, a *quarter of a grain* of the Ioduret of Potassium, dissolved in a quart of water, I was able to trace, for *seven days*, the presence of Iodine in my urine, and for *six days* in my saliva. After taking, on the other hand, the same quantity of iodurated water, in the course of one or two hours, I was not able to trace the Iodine in my saliva at all, and in my urine for *two days* only. Lastly, I swallowed, fasting, and at a single dose, *five grains* of the Ioduret of Potassium, dissolved in two ounces of water. Traces of Iodine were discovered in the urine during *twenty-eight* hours, and in the saliva during *seventeen hours* only. During the whole day I suffered abundant salivation."—*Annales de Therap., and Month. Journ. of Med. Sciences.*

Pathology.—Arsenic has been detected in the urine of persons who have died from poisonous doses. The kidneys look like tallow. Putrid kidneys. Congested condition of the kidneys. Thick, turbid, purulent urine in the pelvis of the kidneys. Collapsed, empty bladder, or else containing only a few drops of whitish, turbid urine. (32.)

According to Orfila, the urine is not suppressed in acute or sub-acute poisoning with Arsenic, while Flandin and Danger came to a directly opposite result. (2. 11.)

When horses are deprived of food and drink for forty-eight hours, the bladder being previously evacuated, they will pass a gallon and a half of urine per day.

Dogs will pass, in the forty-eight hours, two pints, six ounces. (2. 11.)

Two ounces of Arsenic will kill a horse in not less than forty-six, nor more than one hundred and forty-four hours.

A little more than three grains will kill a dog, in from fourteen to twenty-seven hours.

One ounce, in six pints of water, causes acute poisoning in the horse.

Two ounces, in twelve pints, causes sub-acute poisoning. (?)

Six horses died respectively in 1 hour, $1\frac{1}{2}$, 8, 21, 29, and 51 hours, and the urine varied from six pints to five fluid drachms.

Dogs died in about twelve hours—the quantity of urine varied from seven drachms to two gallons. (2. 11.)

In both horses and dogs the urine contained a notable quantity of Arsenic, which was detected in the urine as soon as constitutional symptoms of absorption became manifest. (2. 11.)

Delafond, Professor of Pathology and Legal Medicine, at the Veterinary School of Alfort, infers that the urinary secretion is not suppressed, during acute poisoning from Arsenic; but, at the same time, there is no doubt that the quantity is *notably diminished*. (2. 11.)

If the figures 100 be taken to represent the quantity secreted in the healthy state, in poisoned horses, we have 29, and in dogs 17 only.

Some experiments before a commission were performed as follows: A horse fasted fifty hours, and then got one ounce and a quarter, in ten pints of water; he died in four hours, without having urinated; but about eight or ten drachms of water were found in the bladder. Another horse died in two hours and twenty minutes, and only five drachms of urine were found. (2. 11.)

A dog fasted from food and drink fifteen hours, and then got eighty grains of Arsenic, in two pints of water—died in three hours. The mucous membrane of the bladder was of an intense red, and it contained between three and four drachms of yellowish-red urine.

Another dog got thirty-five grains of Arsenic, and died in an hour and a half; the bladder contained four or five drachms of arsenical urine.

These experiments also enabled the commissioners to verify a curious observation of M. Delafond, viz., the almost instantaneous production of false membranes in the bowels. (2. 11.)

Clinical Remarks.—It has sometimes been administered with benefit in obstinate cases of irritable bladder, with frequent urging to pass water, and burning, smarting pains in the organ, before, during, and after urination. Also in chronic inflammation of the neck of the bladder, with partial paralysis, difficult and scanty urination, turbid and light-colored urine, charged with phosphates, or scanty, acid, and deep red urine. (10.)

Male Sexual Organs.—Itching of the parts; burning of the prepuce during an erection. Stinging-itching of the parts. Inflammation and swelling of the genital organs, which are excessively painful and sometimes gangrenous; the glans is swollen, blue, and red, with rhagades; swelling of the scrotum. Nocturnal emissions, with or without lascivious dreams, sometimes followed by continuous erections. Discharge of prostatic fluid during a diarrhœic stool. (21. 26.)

Pathology.—The glans and scrotum are entirely blue. The penis and scrotum are swollen and blue. Œdema of the scrotum. (32.)

Clinical Remarks.—A neglected case of phimosis and gonorrhœa was cured with Arsenic alone, by Dr. Erhardt, in a man, aged forty years, of strong constitution, with violent inflammation and swelling of the prepuce, blue spots already making their appearance on the parts affected. [Arch. f. Hom., H. xviii., 1, 50.] (26.)

It is often indicated in chimney-sweepers' cancer, when the scrotum is swollen, painful, and of a bluish color, and there is ulceration, with burning pain in the morning, and worse when the parts become cold. If the subject be feeble and emaciated, and the ulceration extends rapidly, this remedy is still better indicated. (10.)

We have used it with advantage in troublesome cases of œdema of the scrotum, accompanying albuminuria. Arsenicum, in alternation with Nitrum, have generally afforded prompt relief in such cases. (10.)

It is homœopathic in malignant ulcerations of the penis, with burn-

ing pains, and tendency to run into gangrene and sloughing. It is applicable to individuals with broken-down and impoverished constitutions. (10.)

In dry and scaly eruptions upon the scrotum, and in burning, itching, and smarting chronic eczematous patches upon the scrotum and penis, with an œdematous condition of the prepuce, it has often done excellent service. (10.)

Female Sexual Parts.—Painful burning. Red swelling of the vulva. Profuse and premature menses. (19.) Leucorrhœa dropping out while the woman is standing, with emission of flatulence. Acrid, corroding, thick, yellow leucorrhœa. Induration or even cancer of the uterus. (32. 26.) Inflammation and gangrene of the genital organs. (3.)

Pathology.—The labia and clitoris are bloated and black. The vagina open and flaccid, and the inner surface mortified. Uterus putrid. Inflammation of the uterus and fallopian tubes. The *os-tinæ* is sphacelated and open. Inflamed appearance of the urethra. (32.)

Clinical Remarks.—*Arsenic in Affections of the Uterus.*—Dr. Locock cured a case of menorrhagia with it, which had withstood the endeavors of every physician consulted. (11.)

The pain in ulcerated cancer of the uterus was relieved by it as soon as the effects of Arsenic displayed themselves. (11.)

Dr. Hunt cured nine cases of menorrhagia.

CASE 1.—Was of sixteen years' standing; menses too profuse, continued for eight or ten days; returned again at the end of a fortnight, or sooner; irritable state of the bowels, which came on three or four days previous to the menstrual period. (11.)

Fowler's solution, four drops three times a day, commencing just after the menstrual period; next period was postponed for thirty days, and only continued five, and natural quantity; neither did diarrhœa supervene. Then took it only three or four times during the week preceding menses; cured; quite regular. (11.)

CASE 2.—Of two years' standing; too frequently and profusely; bowels much relaxed; tongue red and shining; troublesome cough, with much expectoration.

Dose, one-twentieth of a grain, three times a day; no improvement from it for three weeks, except the bowels were less relaxed; rarely three days in succession, free from menstrual discharge. In three weeks more the discharge ceased, and did not return for thirty-nine days, when it was regular, and only lasted six days. Continued it one month longer; gained flesh and strength; cough almost ceased; menses regular. (11.)

CASE 3.—Was one of three or four years' standing, with obstinate diarrhœa. Besides these, six other similar cases are reported.

Dr. Johnson says, it certainly seems that Arsenicum exerts some power in checking menorrhagia in irritable uterus, the symptoms being pain, with heat and bearing-down; uterus tender to touch, and tumid.

Dose, one-twentieth of a grain, three times a day, for four months. Pains ceased entirely in six weeks. A neuralgic pain of the face, returning regularly a few days previous to the patient's being unwell, was also cured by the long-continued use of it. (11.)

CASE 2.—Irregular menstruation, rarely too frequent, generally at intervals of five or six weeks, accompanied by erratic pains in the loins, head, chest, and under sternum. Dose, three drops of Fowler's solution, twice a day, for three months. The patient suffered less each period, and in three months was quite well. (11.)

Dr. Hunt remarks, as in cases of poisoning with Arsenic, the genito-urinary mucous membrane is apt to exhibit decided signs of irritation and of inflammation; the benefit derived from this remedy may be explained by its acting on the mucous membrane of the uterus as a stimulant. It follows that the cases in which it should be given with the greatest advantage are those in which the disordered condition of the uterus has been kept up or induced by debilitating causes. [*Med. Chir. Rev.*, vol. xxix., p. 371.] (11.)

Horn has reported a case in the *Archiv. Bd.*, 10 Hft., 1, p. 161, of a girl affected with intermittent fever, and a large *venereal* ulcer of the vagina. Arsenic cured both. [Time of cure and strength of medicine not stated.] (26.)

Homœopathic physicians prescribe it in cancerous affections of the uterus, when there are acrid and irritating muco-purulent discharges from the organ; induration and ulceration of the os or fundus-uteri; burning sensation in the internal sexual organs and abdomen; great thirst; nausea; vomiting of food and drinks; hiccough; great anguish in the chest and stomach, which deprives the patient of rest; exacerbation of the symptoms towards midnight. (10.)

In the old school, it is also employed in uterine cancer. Drs. Hunt, Locock, and others, consider it a remedy of great value in this malady. These gentlemen also commend it highly in menorrhagia and irritable uterus. (44. 10.)

Against obstinate chronic leucorrhœas of feeble and cachectic females, with acrid, corroding, and muco-purulent discharges, and sensation of burning and excoriation in the vagina, it has been employed with benefit. (10.)

Croserio advises it in corroding ulcers of the uterus, when the following symptoms are present: "Fits of anguish and melancholy; pale, yellow, or livid, or lead-colored countenance; burning thirst; weakness of digestion; diarrhœa; violent burning sensation, not only in the sexual organs, but in the whole hypogastrium, when the pains are aggravated towards midnight, and, at the same time, sympathetic affection of the chest, in which the patient feels an indescribable anguish, which admits of no rest in any position. And this state is accompanied with unquenchable thirst; fever; burning during micturition; tenesmus and burning at the rectum; lancinations from the hypogastrium into the vagina; debility in the back; burning ulcers; putrid

and mortifying ulcers; emaciation and general failure of strength; glandular swellings." (10.)

The same writer employs it in advanced stages of hydrometra, with œdema and a sense of suffocation, rendering it impossible to retain a horizontal position. "Under the influence of Arsenicum," writes Leadam, ("Dis. of Females," p. 281,) "a woman, in the sixth month of pregnancy, with œdema of the extremities, and who was forced to pass whole nights upon a chair, with scanty and thick urine, &c., progressed most favorably; the symptoms diminished by degrees, respiration became more easy, so as to permit her to pass her nights in bed. Labor came on at the proper period, and the child, although delicate, has lived." (10.)

It occupies a high place as a remedy in ovarian dropsy. Hartmann, Croserio, Teste, and Leadam, have prescribed it with advantage in this malady. In alternation with Apis-mel., it has frequently proved serviceable in our hands. We usually prescribe the thirtieth decimal dilution, and repeat the doses at long intervals. (10.)

In bad cases of *ramollissement* of the uterus, it is, according to Hartmann, one of our most specific remedies. It corresponds with a general sinking of the vital powers; discharge of fetid, dark, acrid mucus from the uterus; distention of the large intestines with flatus; extreme restlessness, anxiety, and irritability, or a listless and stupid condition; scanty, offensive, and high-colored urine; rapid and feeble pulse; thirst, and a universal tendency towards collapse. (10.)

Many cases of menorrhagia require the employment of this medicine. It is chiefly appropriate when the disease occurs in cachectic, chlorotic, and delicate females, who have feeble recuperative forces, and whose tissues are relaxed and debilitated. The menses come on prematurely, are profuse, and are of a lighter color than in health, without inflammation, and where there is merely functional derangement and an atonic condition. (10.)

In metritis it is indicated by the following symptoms: Tendency to gangrenous degeneration; sinking of the forces, vesical and anal tenesmus; cold surface; shooting or burning pain in the hypogastrium; rapid and thready pulse; tympanitis; tenderness of the abdomen upon pressure; pale and sunken countenance. Croserio uses it in the thirtieth dilution, in these cases. (10.)

This remedy is very useful in œdema-labii, hydrorrhœa, and hydrops-amnii. (Peters' "Dis. Mar. Females," pp. 77, 78, 79.) Arsenicum, in alternation with Cantharides, is very useful in suppression of urine. (32.)

Larynx and Trachea.—Feeling of dryness and burning in the larynx. Phthisis of the trachea, with deficient secretion of mucus; acute and chronic inflammation of the trachea; grippe, particularly when accompanied with inflammation of the eyes and photophobia. Cough, as if occasioned by the smoke of Sulphur, with a sense of suffocation or constriction in the trachea, after drinking, or by titillation in the

trachea, with want of breath. Cough, during a walk in the open air; early in the morning; after tea; at night, with asthma and suffocative fits; dry cough, deep and short; short and hacking cough. Expectoration difficult, scanty, and frothy; tenacious mucus, saltish, with pain in the chest while raising, preceded by oppression of the chest; blood-streaked mucus, sometimes accompanied with a burning heat in the whole body. During cough, arrest of breathing, with various pains. (32. 26.) Tremulous voice; unequal voice—at times strong, at times feeble. (19. 26.) Oppressed respiration, with a dry cough. Membrane of the larynx and trachea hot and painful. Breathing short, laborious, and sometimes painful. (3.)

Pathology.—Redness of the mucous membrane of the larynx and trachea. (3.) Redness and inflammation of the inner coat of the trachea. (32.)

Clinical Remarks.—It has cured chronic catarrh of the larynx, with coryza, difficult breathing, hoarseness, short hacking cough, weakness, drowsiness, restlessness, irritability, and symptoms much worse during the night. If the inflammation extends to the bronchial tubes, and there is much general debility, with violent action of the pectoral muscles during an inspiration, it is likewise indicated. (10.)

By some medical men it is highly commended in epidemic influenza and gripe. Our own experience has been less favorable with it in these affections. (10.)

Chest.—Shortness of breath; anxious and oppressive shortness of breath; painful breathing; moaning breathing. Asthma, chronic, returning frequently. Oppression, labored breathing, when ascending an eminence. Arrest of breathing, from pain in the pit of the stomach; from anguish, and pain in the abdomen, with moaning and lamenting; in the evening, when getting into bed, with wheezing in the trachea. Suffocative oppression and arrest of breathing, at times accompanied with weakness and excessive debility at night, or in the evening, in bed; suffocative catarrh. Angina of the chest. Constriction of the chest at every motion, with apnœa. Hysteric spasms in the chest. Evening-chilliness in the chest and abdomen. Burning and heat in the chest. Hydrothorax. Palpitation of the heart, with great anguish, especially at night. Cancer of the breast. Yellow spots on the chest. (19. 26.) Heart-distress in the cardiac region; irritable and too frequent beating of the heart, without a change in the pulse. Violent palpitation of the heart, especially at night; also with great anguish. Suspended contractibility of the heart. Stitches, burning, sore pain in the left side of the chest. (19. 26.)

Pathology.—Redness of the pleura. Effusion of lymph or serum into the cavity of the pleura. Red spots, and occasional congestion of the lungs, and redness of the membrane lining the air-tubes. (3.) Adhesion of the lungs to the pleura-costalis. Clear serum (about three ounces) in the pleural sacs. Inflammation of the pleura-costalis. Parts of the diaphragm are inflamed. Dark color of the lungs.

Dark blue lungs, filled with fluid blood, the interior of the parenchyma being, for the most part, gangrenous and black. Inflamed, gangrened lungs. Redness and inflammation of the pericardium. Accumulation of fat about the heart. Flaccid, or else rigid and contracted heart. A quantity of thick, oily, pitch-black blood in the right ventricle, or else moderate quantity of blood in that ventricle. Left ventricle empty. Opalescent spots upon the inner serous membrane of the heart, arising from a pseudo-membrane. Red, violet spots, with softening of the inner coating of the heart. Large red or black spots in the left ventricle. Inflammation of the *valvulæ-semilunares*, (in animals). A coagulum in the aorta-ascendens of three inches long, and of a pale, yellow color, resembling a polypus. (32.)

Clinical Remarks.—Dioscorides, who wrote the first treatise on arsenical preparations, first used it empirically in the treatment of chronic diseases of the chest and larynx. In chronic catarrh and spasmodic asthma, he advises it internally and by fumigations. Pliny, Galen, and the Arabian physicians of a few succeeding generations, adopted the views of Dioscorides, and made some excellent cures. Afterwards, the remedy fell into disuse for many centuries, until Hahnemann, about half a century since, again brought it into use, in virtue of its homœopathic relations to these maladies. Quite recently, Koepl, Mackenzie, and other physicians of the old school, have employed it in hay-asthma, and in ordinary forms of catarrh, with marked success. (44. 10.)

Hartmann considers Arsenicum "a specific for asthma, when it depends upon a dilatation of the heart, hypertrophy, emphysema, or œdema of the lungs, hydrothorax, chronic bronchitis, hyperæmia of the bronchial mucous membrane, tuberculosis, (scrofulosis,) abuse of China or Iodine. Arsenicum is more particularly indicated by the following symptoms: Frequent cough during motion, as if caused by the vapor of Sulphur, particularly at night, attended with constriction in the trachea and suffocative fits; or even without cough, this suffocative oppression of the chest and arrest of breathing set in in full-grown persons; a real spasmodic asthma, accompanied with anguish and restlessness, as if the whole chest would be constricted; the patient cannot speak a word without making the asthma worse, which sets in particularly in the evening."

Small enumerates the following symptoms of ordinary cough, indicative of Arsenicum: "Cough, excited by a sensation of dryness of the throat, worse in the evening, and attended with heat and burning; periodic, dry cough, or cough with tenacious mucus, difficult to expectorate, and sense of suffocation, especially of old people; bloody expectoration, with burning."

It will be required in typhoid pneumonia, with excessive debility; short, anxious, and oppressive respiration; evening chilliness in the chest and abdomen; palpitation of the heart, with great anguish; stitches, or burning pains in the chest; scanty and red urine; moaning; rapid and weak pulse; dryness of the mouth; dark, cracked, and

tremulous tongue, thirst, difficult and scanty expectoration of tenacious mucus, voice weak and hoarse, cough worse at night.

Next to Apis-mellifica, in our judgment, ranks Arsenicum as a remedy in hydrothorax. Very numerous pathogenetic, pathological, and therapeutical observations confirm this opinion. A reference to the phenomena enumerated under "Chest" will demonstrate its perfect homœopathicity to most cases of pleuritic and cardiac effusion. The best results have been obtained from the sixth to the thirtieth dilutions. (10.) Kali-hyd. and Apocynum are much more useful than Apis. (11.)

CASE 1.—A man, aged thirty-two years, formerly healthy, complained as follows: Weakness of memory, confused feeling in the head, frequent headache, with heaviness and pressure in the head, (less in the open air), and over the eyes and temples; the right eye is somewhat inflamed, with pressure, pain, and drawing pain in the same, obscuration of sight. Nightly tooth and cheek-ache, (temporarily relieved by warmth). Constant cough, with tough, tenacious mucus in the chest, difficult to raise. Cough, with feeling of tightness of the chest; great anguish, obliged to sit up in bed in order to get breath; pain and pressure in the præcordial region, losing his breath on every motion, and thinks he must die, with great weakness and prostration. Dr. Gaspary prescribed a few doses of Arsenic, and, in the course of four weeks, the patient was completely cured. [*Annal.* III., 426.] (64. 26.)

CASE 2.—A wine-merchant had been suffering, for eight years, from the following: As soon as he lies down to go to sleep at night, he is seized with cramps in the chest, dyspnœa, expirations whistling, violent constriction of the chest and throat, so as oblige him to sit up in bed, with temporary relief, but gradually respiration becomes so difficult as to threaten suffocation, and perspiration breaks out all over him; this state of things continues three or four hours until late at night, after which he falls asleep, although interruptedly, with feeling of burning and soreness in the chest. These attacks are induced by being obliged to be in a vault part of the day. According to Dr. Atto-myrr, he received Ars., 30; though the patient followed his occupation as before, he has had no return of the disease. [*Briefe über Hom.*, IV.] (64. 26.)

CASE 3.—A man, about twenty-five years of age, while in active military service, wearing a very tight dress, especially across his waist and chest. On one occasion, during a forced march on horseback, was taken with the following: During stormy weather, and a thick atmosphere, on walking rapidly during the change of temperature from hot to cold, or even on laughing heartily, he gets cramps in his chest and dyspnœa, especially on walking against the wind, so as to oblige him to stand still; in the meantime feeling a strong pressure on his lungs, with anguish; as soon, however, as some white, glue-like, sticky saliva, in small air-bubbles, rise from his throat, his breathing becomes easier, though always getting worse again on returning

to a warm room. After the paroxysm, there remained a feeling of general *malaise* for some time. This condition he has endured for five years, without having received benefit from allopathic medication. Dr. Gross prescribed Ars., 30, in six ounces of water, a tablespoonful to be taken once a day, and effected a complete cure. [*Arch. f. hom. H.*, XV., 103.] (64, 26.)

CASE 4.—A farmer, in the vicinity of Moscow, had been suffering for two years from *spasmodic asthma*, returning every night, accompanied with dreadful anguish, cold sweat, &c. Dr. Schweikert gave him one dose of Ars., 30, which restored him completely, whereas nine months of allopathic treatment had been pursued, without the slightest benefit. [*Allgem. h. Z.*, I., 127.] (64, 26.)

Back or Trunk.—Violent burning pain in the head, aggravated by contact. Tearing and drawing in the back and between the scapulæ, obliging one to lie down. Soft, painless swelling on the neck and lower jaw. (32, 26.) Myelosis. (19.)

Clinical Remarks.—A robust farmer, aged thirty-eight years, of choleric temperament, had been suffering for four and a half years from a peculiar *spinal irritation*. At first, the paroxysms appeared at long intervals, until they gradually returned so often as to give him only five to fourteen days' ease. At the beginning of the paroxysm, there was: Want of appetite, qualmishness, nausea, periodical pressure in the stomach, increasing with the attack, light and interrupted sleep. This condition generally continued two days; on the third day, along with the above, he felt pressure, mostly on the right side of the spine and cervico-dorsal regions, qualmishness, with feeling of uneasiness, anguish, with pressure in the stomach. On the fourth day, this feeling of pressure in the spine moved through the whole length of the spine to the first cervical vertebra, and changed into a severe, violent burning pain, worse on touching, but somewhat alleviated on gentle exercise in the room; at night, and until morning, he was comparatively free from it; but, during sleep, had frequent sudden jerks through the body. The whole region of the left hypochondrium, extending over the stomach, being almost numb. On rising in the morning, frequent urging to stool; had about five to seven stools, until about three to four in the afternoon, with griping pain before stool. Burning and soreness of the anus after stool, which was yellow and liquid, at first; but, during the day, becoming gradually more slimy and very small. He had also great prostration, want of courage, and ill humor. On the sixth day, the condition generally grew better; and, on the seventh, there remained nothing but weakness. The cause of the above is attributed to his having taken a severe cold while sitting on cold stones. Dr. Schubert restored the patient's health by a few doses of Arsenic, 30. [*Arch. f. hom. H.*, II., 126.] (64, 26.)

CASE 2.—Dr. Schrön says (*Hygea* II., 412): In May, 1854, an apparently healthy-looking gentleman consulted me for the following condition: Burning pain in the stomach and abdomen after a full

meal; stool irregular, mostly diarrhœa, with burning pain at the anus and during micturition; frequent cramps in the calves of the legs, and occasionally a feeling of pressure in the spinal marrow, and a sensation in the same as if hot air was passing through it; no sooner had it entered the brain than he became dizzy, and fell senseless to the ground, in which condition he remained about ten or fifteen minutes, after which he recovered himself, and his head felt free from pain, except a certain amount of numbness, which remained for some little time after the attack. He received eight doses of Ars., 6, in four weeks, after the expiration of which no return occurred. (64, 26.)

Upper Extremities.—Tearing in the arms and hands. Swelling of the arm, which is covered with foul-smelling, black blisters. Nightly drawing and tearing, from the elbow to the shoulder. Drawing, tearing, and stitching in the knuckles. Cramp and spasm in the fingers. Hard swelling of the fingers, with bone-pains in the same. Discolored nails. Burning ulcers at the tips of the fingers. (32, 26.) Long-continued perspiration of the hands and feet. Coldness of the extremities. Tremor of the extremities, both hands and feet. Paralysis of the extremities. Stiffness of all the joints. Extreme weakness and paralytic feeling of the extremities. (19, 26.) Almost entire loss of muscular power of the arms. (2.)

Pathology.—Blue spots on the limbs. The nails of the fingers are blue-black. Fingers and toes violently contracted and bent backwards. Muscles of the arms rigid.

Clinical Remarks.—It appears to have some homœopathic relations with certain paralytic affections of the arms. In one case of "dropped wrists," occurring in a middle-aged man, of impaired constitution and intemperate habits, with nightly paroxysms of pain in the wrists and arms, and great nervous excitability, we have observed marked curative effects from repeated doses of the thirtieth dilution of Arsenicum. (10.) [See pp. 626 to 631.] (11.)

It is an excellent remedy in periodical neuralgic pains in the arms and fingers, with coldness of the hands, and great weakness and trembling of the arms. (10.)

In dry, scurfy eruptions upon the hands and arms it has often been prescribed with success. (10.)

Lower Extremities.—Cramps and spasms in the lower limbs. Tearing in the lower limbs, from the hips to the ankles, with uneasiness, obliging one to move the limbs all the time. Nervous coxagra. Paralytic weakness of the thighs. Pain in the knee joints, as if bruised. Contraction of the hamstrings. Herpes in the bend of the knee. Cramps in the calves. Phlegmasia alba dolens. Inveterate ulcers on the legs, with burning and stinging. Hard, shining, burning swelling of the feet, with black-blue burning blisters on the dorsum of the foot. Pain in the balls of the toes, as if excoriated, when walking. Phagadeuic ulcerated blisters at the tips of the toes. (32, 26.) Long-continued perspiration of the hands and feet. Coldness of the ex-

tremities. Tremor of the extremities, both hands and feet. Numbness of the extremities. (19, 26.)

Pathology.—Papescent softening of the muscles of the thigh. Blue spots on the limbs. Fingers and toes violently contracted and bent backwards. (32.)

Clinical Remarks.—CASE 1.—Ulcer of the lower extremity, in a woman, aged sixty-five years, who had been affected with it for eighteen years, and treated by several allopathic physicians without the slightest benefit. The ulcer began on the left internal maleolus, with small vesicles, like the itch, gradually bursting, one after another, and discharging a clear acrid fluid, gradually spreading until it became four or five inches in size, discharging a more and more foul and offensive substance. Pains in the beginning, drawing and tearing, and changing, of late years, into a violent burning pain. The patient has kept in bed for two years past, with daily œdematous swelling of the feet, and had lost much flesh; no appetite, and with a cachectic appearance. Dr. Müller (*Hyg.* XI., 108) treated her by Ars., 8—a dose every other day, for thirteen weeks, at the expiration of which a cure was effected. (64, 26.)

CASE 3.—Scabious ulcer of the leg, in a man aged twenty-three. Has previously had the itch, and was badly treated—the ulcer being in such a state that a proposition for amputation was made. At the commencement, the ulcer was covered with crusts, discharging an acrid fluid; the edges were thick and elevated, surrounded with itch-like pustules; lately, it assumed a dirty blackish surface, without sensation, and discharging a foul matter, evidently gangrenous. Dr. Müller cured the patient by Ars., 8, in seven weeks. [*Hyg.* III., 363.] (64, 26.)

Eberle says Arsenic has also been recommended in rheumatism, and adds, in the chronic variety, he has, in a few instances, employed it with remarkable advantage. But says, the powers of this remedy are more decidedly evinced in syphilitic rheumatism, and in that variety caused by the imprudent use of Mercury. In rheumatic pains from Mercury, Eberlee knows, indeed, of no other remedy which is so effectual. Kellie, Hardmann, and Jenkinson also praise it here. Eberle says: Bark and Arsenic, in intermittents, are suited to very different states of the system—viz., the Bark, when it is weak and relaxed; the Arsenic, in persons of a firm, healthy constitution. Although this latter seems homœopathic at first sight, yet the ultimate action of Arsenic is to weaken, paralyze, and cause dropsy, from impoverishment of the blood. (11.)

Catarrhal Symptoms.—Excessive discharge of an acrid, burning water from the nose. (32.)

Windpipe.—Laryngeal phthisis, with deficient secretion of mucus. Burning feeling in the larynx. Cough, with tightness of the chest, and tenacious mucus on the chest. Dry evening cough. Bloody cough. Suppuration of the lungs. (32.)

Chest and Respiration.—Tightness of the chest. Burning and heat in the chest. Palpitation of the heart, with great anguish. (32.) Arsenic has been found very useful in palpitations of the heart, endocarditis, and valvular disease, especially of the left ventricle, and affecting the mitral valve. (54.)

Clinical Remarks.—Useful in spasmodic asthma. Arsenic is especially serviceable in pericarditis and in angina-pectoris. (11.)

Trunk.—Violent burning pain in the back. Drawing in the back. (32.)

Upper Extremities.—Swelling of the arm, with black pocks. Arsenic has been very successfully used in rheumatism, especially of a syphilitic nature, or where the joints of the fingers are affected with fine swellings.

Lower Extremities.—Ulcers on the legs; swelling of the feet, with burning.

EFFECTS ON SHEEP.—One hundred sheep, with chronic pleurisy, were treated with Arsenicum. One drachm was mixed in the salt, and given to twenty. Two died; the rest recovered entirely in a week. The same was given to the rest; five died, and the rest were cured.

One drachm of Arsenic was mixed with a handful of salt and given to a healthy sheep. It produced violent colic, and the flanks were drawn in by violent contractions. It refused to eat for two days, and was much emaciated, and passed no urine for sixteen hours, and the quantity then and subsequently was much reduced. (11.)

Pathology.—*Morbid Appearances of the Respiratory System.*—These are redness of the pleura, effusion of lymph or serum into the cavity of the pleura, red spots, and occasional congestion of the lungs, and redness of the membrane lining the air-tubes. (54.)

Clinical Remarks.—In long-standing cases of chronic bronchitis, with copious expectoration and rapid emaciation, M. Garin gives Arsenic with success. (13, 46.)

ARTEMISIA - VULGARIS (RADIX).

SYNONYMES.—*Mugwort.* French.—*Armoise-Commune.*—German.—*Beifusswurzel, Gemeiner Beifusswurzel.*

AUTHORITIES.

Ruckert's *Materia Medica.* Metcalfe. Peters.

GENERAL REMARKS.

Almost all the species belonging to the genus *Artemisia* are possessed of bitter and aromatic properties, and several afford the "worm-seed." The *Artemisia-vulgaris* was employed by many of the older

physicians; but it had fallen into oblivion, when its use was revived in Germany by Burdach, a physician at Triebel, near Sorace, who recommended it strongly as a preventive of epilepsy. Since that time it has been much prescribed in that country, but its employment has not extended much to other countries of Europe, or to this side of the Atlantic. The root is the part preferred; formerly the herb and the tops were solely used.

The root was employed in epilepsy centuries ago, but it had been neglected, or was only exhibited as a nostrum when Burdach entered upon his investigations, of which the following is a summary:

The root of the *Artemisia* should be dug up in autumn, after the stalk has become dry, or in the spring before the stalk has shot up; but, perhaps, the latter half of November is as good a period as any. It must be freed from the adherent earth by shaking. Burdach regards washing to be objectionable, as the root may lose some portion of its efficacy thereby. The old, ligneous, mouldy, and damaged parts of each root must be carefully removed, and the fresh young side-roots (fibrillæ), which are distinguished by their smell, clear color, and greater juiciness, must be spread on paper, and dried in the shade, and, as soon as they become brittle, they must be carefully preserved. Besides the fibrillæ, the soft, sound, and juicy parts of the root, especially the fleshy rind of the thicker roots, may be used.

The period required for drying them varies; in moist weather, it may require two months; but, late in the year, the desiccation may be aided by the gentle warmth of the sun or of a stove; the latter must never, however, rise higher than from sixty-four to sixty-eight degrees of Fahrenheit. If put away too early, the root becomes spoiled; if too late, it loses many of its volatile parts. When powdered, it ought not to be kept too long, as the volatile portions escape, and it soon becomes devoid of smell. Even during the process of pulverizing loss is sustained, and the fresh powder has a much feebler odor than the entire root, so that Burdach advises, for distant patients, that the root in substance should be sent to them, and that they should be recommended to pound it for use in a well-covered mortar. By pulverizing, the inner, hard, woody parts are separated from the smaller roots; these must be removed and thrown away, as the powder of the cortical substance of the small radicles has alone been found efficacious. The smell of the well-dried root is very strong, pungent, and peculiar, especially when we open a vessel in which it has been stored away in quantity. The taste is sweetish, sharp, and nauseous.

EFFECTS ON THE ECONOMY IN DISEASE.

It has been already remarked that Burdach recommends the *Artemisia* especially in *epilepsy*; and he affirms that it requires no preparation or special attention.

It is most efficacious when given about half an hour before the attack, which it usually prevents; but, if this be impracticable, it may be given as soon as the patient comes to. His dose is a heaped-up teaspoonful (from fifty to seventy grains), which may be administered in warm beer; the patient should be put to bed immediately, covered up warm, and allowed warm small-beer to drink, so as to occasion diaphoresis—care being taken that he does not expose himself to cold. This course is to be repeated so long as there are any traces of mischief. When the remedy, however, acts favorably, Burdach asserts that frequent repetition is not often necessary. At times it happens that, when the dose has been raised to a drachm and a half, and thrice repeated, no critical sweat follows; Burdach then aids the operation by giving the *liquor cornu cervi succinatus* (*spiritus Ammoniae succinatus*), in an infusion of *Serpentaria*, *Valerian* root and *Arnica* flowers; but the effect, he says, was always better when the diaphoresis was produced by the *Artemisia* alone. One important advantage in the use of this agent is, that a judgment can be speedily formed of its utility; when much may be expected from it, a marked improvement usually occurs after the first doses. In those cases of epilepsy which occur every day, and sometimes even from three to fifteen times a day, and especially where the paroxysms are so violent and frequent as to leave little interval for the patient to be restored to consciousness, the *Artemisia* has proved more certain in its operation, either by removing or mitigating the disease. In such cases, two doses were given on the first day, and afterwards one tolerably strong dose daily, till the third day. In those forms of epilepsy whose attacks recurred twice daily, morning and evening, the *Artemisia* acted very beneficially; the paroxysms soon became somewhat weaker, shorter, and were postponed a day or two. In such cases it is advisable to continue the remedy for some weeks. Infants at the breast bear the *Artemisia* especially well. It is equally efficacious in the epileptic attacks of young females from twelve to fifteen years of age, and prior to the establishment of menstruation. Under its use the catamenia have generally taken place, and the epilepsy has disappeared. On the other hand, the *Artemisia* was found to aggravate cases of epilepsy occurring as a disease of growth (*Entwickelungskrankheit*), in young persons from seventeen to twenty-two years old, and as a consequence of great corporeal development. It was equally unfortunate in cases of *epilepsia-nocturna*, where the paroxysms came on irregularly, at an interval of about five, ten, or fifteen days, and generally about midnight; as well as in that form in which, after the patient had suffered for six, seven, or eight weeks, under violent symptomatic sweats, a morbid condition ensued from two to three times every twenty-four hours, consisting of repeated epileptic attacks, with great prostration in the intervals.

These are the main results of the communications of Burdach on this subject. The number of his experiments and observations was considerable, and the results appear to have been frequently most

happy, especially in the case of females, who seem to have shown themselves more beneficially impressed by the remedy than males; the proportion of cures being as three to two. Tosetti gives the proportion of cases in women and children to that of men, as eight to six.—METCALFE.

In the Berlin Charité, the *Artemisia* is said to have been used with equal success. The German journals contain numerous cases, on the authority of E. Gräfe, Wagner, Van Maanen, Wolf, Osann, Bonorden, Schlüter, Bird, Löwenhard, Geis, and others. But few physicians, according to Riecke, have been disappointed in it, and where they have been, he ascribes the failure to its having been given in cases for which it was inappropriate, or to the preparation of the *Artemisia* not having been properly attended to.

In consequence of a German physician having recommended the *Artemisia-absinthium* to Professor A. T. Thomson, Professor Elliotson was induced to try it in epilepsy. The patient to whom he gave the medicine was a girl, seventeen years of age, who had been affected with epileptic fits for four months—three or four occurring daily. A drachm of the powder of the *Artemisia* was given three times a day. This was on the 30th of March. On the 9th of April the dose was increased to two drachms, when the fits became less frequent, but not less severe. On the 16th, the dose was repeated every four hours. She had only one slight fit in the course of twelve days, and, on her dismissal, on the 24th of May, she had had no fit for twenty-six days. Dr. Elliotson was of opinion that the strong infusion would be less offensive to the patient, and quite as effective as the powder.

Besides epilepsy, the *Artemisia* has been used with advantage in other diseases, as in *St. Vitus' dance*. Wutzer employed it successfully in the *convulsive diseases of childhood*, and it is recommended by Biermann in *eclampsia-infantum*, occurring during the period of dentition. He recommends it to be given to children in gradually increasing doses, commencing with half a grain; and, an hour afterwards, giving a grain, and, in two hours, two grains, which is usually the last dose required. The gradual augmentation of the dose he considers advisable, “to prevent the crisis, which the *Artemisia* induces, from being too turbulent” (*stürmisch*).—METCALFE.

Kölreuter, of Carlsruhe, administered the *Artemisia* in different diseases, with great success. He prefers the *extractum resinosum radices Artemisiæ-vulgaris* to the root in substance. This is prepared in the following manner:

A quantity of the dried and powdered root is covered with highly rectified spirits of wine, and permitted to digest for some time; the filtered liquor is then evaporated in an earthenware vessel, until it has attained the consistence of an extract.

Kölreuter employed this advantageously in the *eclampsia of children*, (in certain cases after the application of leeches); in tormina, unaccompanied by inflammation; in the *diarrhæa of children and adults*; in sporadic cases of *cholera morbus*, and in *dysentery*, after

the bloody evacuations had ceased; in *gastric fevers*, on their assuming a nervous character, and in *dysphagia*, *cardialgia*, *chronic vomiting*, *scirrhus of the stomach*, *chronic cephalalgia* and *neuralgia of the face*; in *chlorosis*, and in *obstruction of the catamenia*, as well as in *epilepsy*. The dose, in the twenty-four hours, from ʒss. to ʒj.; to small children, a few grains.—METCALFE.

Such is the chief testimony adduced in favor of the *Artemisia*, by the German writers mainly. It is to be feared that the advantages to be derived from it in epilepsy have been exaggerated. Where there is no organic disease of the encephalon, substances which, like the *Artemisia*, are nauseous, bitter, and aromatic, may be productive of advantage in the way of tonics and revellents. In one case of this nature it was employed by the author, but the results were not striking. When aided by other means and appliances, it appears, likewise, to be powerfully diaphoretic, and doubtless, therefore, in appropriate cases—especially where there is much nervous impressibility—it may be productive of the good effects ascribed to it by Burdach, Köhreuter, and others. Yet, as Osann has remarked, it must be improper where polyæmia or a tendency to active congestion or hyperæmia is present. The analysis of Hergt, Hummel, and Jännike afforded, along with traces of volatile oil, some balsamic resin, both of which are excitants to the living economy.

COMMON MODE OF ADMINISTERING.

The following forms for its administration have been adopted by some of the German authorities :

Decoctum Artemisiæ. Decoction of Mugwort.

℞.—Rad. Artemis.-vulg. concis., ʒj.

Coque cum aquæ fontanæ q. s. per semihoram ad. colat, ℥j.

Half a teacupful of this may be taken every two hours, in cases of epilepsy.—HILDENBRAND.

Pulvis Artemisiæ. Powder of Mugwort.

℞.—Rad. Artemis.-vulg., in pulvere, ʒj.

Sacch.-alb., ʒj. M. et fiat pulvis.

The powder to be administered daily, in the evening, in warm beer, in cases of epilepsy.—LOEWENSTEIN.

Mistura Artemisiæ. Mixture of Mugwort.

℞.—Ext. resin. Artemis.-vulg., gr. iv.

Gum.-arab., ʒj.

Sacch.-alb., ʒiij.

Emuls. amygd., ʒiij. M.

About two teaspoonsful to be given every half-hour, in eclampsia infantum, to be increased to four teaspoonsful.—KÖLREUTER.

CLINICAL OBSERVATIONS AND SYMPTOMS.

This remedy has only been used empirically by some practitioners of our school. Noack and Trinks furnish the following pathogenesis of that drug :

Increase of the epileptic paroxysms. Irritation of the nervous system. Profuse sweat, having a peculiarly characteristic, fetid, cadaverous odor, resembling the odor of garlic. Violent contractions of the uterus ; labor-pains. Prolapsus, rupture of the uterus. Miscarriage. Profuse menstruation ; metrorrhagia. Increase of the lochial discharge.

According to Noack and Trinks, the tincture is prepared from the fibrils of the root. Dr. Schweickert, Jr., has successfully employed the tincture of *Artemisia*, in one-drop doses daily, against the epilepsy of a lying-in woman, which had been occasioned by fright. The root of the plant should be dug out in the fall, after the stem has dried, or else in spring, before the stem comes out of the ground, and should be freed from the adhering soil immediately. The root of the wild-growing plant is better than that which is reared in gardens.

The *Artemisia-vulgaris* is termed "*Beifuss*" (by-foot) by the Germans, on account of the custom which prevails among them of carrying the plant in their shoes in walking, for the purpose of removing the fatigue and weakness consequent upon long journeys or severe illness. It is a very old remedy, which, on account of its specific action upon the uterine system, was formerly employed against *suppression of the menses and lochia*, retention of the placenta, &c. Lately, it has again been recommended for retention and suppression of the menstrual discharge, particularly in weak, hysteric females. Most says that it promotes labor-pains as efficiently as *Secale-cornutum*; *it is said especially to correspond to the spasmodic symptoms which sometimes accompany the appearance of the menses or generally depend upon the uterine system.* It has proved a specific remedy for certain forms of *epilepsy*, for which it has even been employed by the ancient physicians, as has been proved by Wagner, Stoll, and Pitschaft. According to Burdach, who has lately again introduced it into practice, it cures particularly some kinds of epilepsy which occur in paroxysms several times a day, especially when the paroxysms are so violent, and occur at such short intervals, that the patients have no time to recover their full consciousness between the attacks ; on the contrary, it is said, by Burdach, to be entirely inefficacious in the nocturnal epilepsy which occurs every five, ten, or fifteen days, about midnight, although Wolff maintains that he has cured a case of that kind of epilepsy with *Artemisia*. According to Burdach and others, it is, as a general rule, best suited to those kinds of epilepsy which depend upon menstrual irregularities, occurring most frequently in young females whose catame-

nia are about to appear for the first time. *Artemisia* is said to be ill adapted to the epilepsy of young men, from seventeen to twenty-two years old, when arising from too rapid growth; it is even said to aggravate the paroxysms. Roseman has cured with *Artemisia* a case of epilepsy arising from moral causes; Suffert and Geis, a case of epilepsy arising from fright; d'Alguen, a similar case, accompanied with evident congestions of the head, and Wagner, a case of epilepsy accompanied with considerable weakness of mind. Müller, of Pforzheim, has observed that *Artemisia* suppresses the epileptic paroxysms, but that afterwards these paroxysms set in more powerfully than before; he says that *Artemisia* produces this effect even in some cases of the lesser degrees of imbecility; he adds, moreover, that in some cases the paroxysms are aggravated by *Artemisia*, and that, in others, no effect at all is produced. According to Richter, the epileptic fits that are most readily cured by *Artemisia* are those which are accompanied with profuse fetid sweats. According to Tosetti, cases of epilepsy with regular paroxysms, which have been cured with *Artemisia*, are, to the cases of epilepsy with irregular paroxysms, as seven to three; the number of patients cured with *Artemisia*, from the age of six months to that of twenty-two years, is, to the number of the patients from twenty-two years to forty-five, as seven to five; the number of the children and women cured, to that of the men, as eight to six; Tosetti has found *Artemisia* particularly efficacious in uterine, hysteric-, and metastatic-epilepsy. In the *Homæop. Gazette*, Vol. VIII., p. 4, Burdach has published the following remarks: "I have effected permanent cures of menstrual epilepsies with Causticum (with the intercurrent use of Stramonium, Pulsatilla and Aurum), which, as rare exceptions, had resisted the systematic exhibition of the root of the *Artemisia-vulgaris*, one of our principal remedies for epilepsy depending upon menstrual irregularities;—it is true the paroxysms had occurred at intervals of several weeks, which is an unfavorable indication for *Artemisia*, but which seems to be favorable to the *homæopathic treatment of such forms of epilepsy*. *Artemisia* is a certain remedy only in such cases of epilepsy which occur frequently, but most particularly in those cases where the paroxysms occur several times a day." Gitterman, Fritch, and Bonorden mention cases of chorea which they pretend to have cured with *Artemisia*; Henne- mann even reports the cures of two cases of sleep-walking with *Artemisia*. E. Græfe thinks that *Artemisia* is a certain remedy for catalepsy. Heun has employed *Artemisia* with unmistakable effect in violent hysteric spasms; he likewise assures us that he has cured an obstinate case of strangury, in a child, by giving it an infusion of *Artemisia* to drink, and bathing it in a decoction of that plant. Burdach considers *Artemisia* a specific against spasmodic attacks of infants and little children, which are more or less approaching to epilepsy; this is confirmed by Wutzer, Stegmann, and others, who consider the eclampsia of children, in the period of dentition, as belonging principally to that class of spasms for which *Artemisia* is a specific

remedy, more particularly when the children are strong and well fed. Lastly, *Artemisia* is said to have been usefully employed for the following diseases: Periodical spasms in general; gastric fevers, when on the point of passing into the typhoid form; typhus-stupidus; malignant petechial fever; intermittent fever; chlorosis; dropsy; chronic headache and prosopalgia; dysphagia; cardialgia; chronic vomiting; schirrous tumors of the stomach; inflammatory colic of children; diarrhœa of children and full-grown persons; cholera-sporadica; dysentery, after the bloody discharge has ceased.

It will be seen, from the foregoing historical notice of the curative powers of *Artemisia*, that it is an important drug, which deserves to be carefully studied on the healthy organism. This notice has been extracted from Noack and Trinks' "Handbuch." (11.)

In the majority of the following cases, which are abstracted from *Frank's Magazine*, a cure of epilepsy has followed the administration of the root of the *Artemisia-vulgaris* alone. This has long been a popular remedy in Germany for the disease so called; but on account of the want of discrimination to which I have just alluded, very different opinions have been entertained of its efficacy. The homœopathic physician may be able, perhaps, to gather from the following relations some useful hints as to the cases to which this drug will be found applicable, which may serve him as a guide in the treatment of this troublesome affection until we shall be prepared to allot to the *Artemisia* its true place, from a study of its pathogenesis in a *pure materia medica*.—METCALFE.

1. Camerer relates the case of a child, four years old, having epileptic convulsions—mostly in the morning, at intervals of two and four months—preceded by coldness, distress, and drawing in the limbs, and followed by stupor, in which a small powder of the pulverized root was given, three times a day, for fifteen months, and the attacks did not occur during that time, nor for two months after ceasing to administer the remedy.—*Med. Correspond. Würtem. Vereins*, 14, 278.

2. Burdach relates several cases: 1.—A young girl, seventeen years old, affected with epileptic attacks of five years standing, in whom the remedies had had no effect but to reduce the paroxysms to one a day, was perfectly cured by a single moderate dose of *Artemisia*, which was followed by a gentle perspiration. 2.—In a strong, well-developed, plethoric girl, eighteen years old, who had suffered for two years from epileptic attacks, the paroxysms were reduced from twelve to two a day, after thrice using the *Artemisia*, and, after another dose, the author concluded she was well, from hearing nothing further. 3.—A man, twenty-nine years old, periodically epileptic for four years, consequent upon a drunken tumble into the water, was perfectly cured after two doses, followed by a critical sweat. 4.—A somewhat imbecile man, aged thirty-six, attacked from childhood as often as twice a week, and sometimes oftener, had his paroxysms reduced to one a month, after three doses of *Artemisia*; he then took a strong dose once a month, and had no further return. 5.—A young girl of six-

teen, attacked during her development, and suffering a paroxysm every forty-eight hours, was immediately and radically cured by a single dose.—*Hufeland's Journal*, 58, 81.

3. Hufeland gives the case of the healthy wife of a soldier, aged forty-one, who, after changing an active for a sedentary life, attended by sorrow and menstrual irregularities, was attacked with hysterical difficulties, which were soon succeeded by convulsions, passing into true epilepsy. After entering the hospital in April, in spite of antispasmodics, she had five or six paroxysms, followed by a perfect though short soporose state; on the fourteenth of April, medication was suspended, and, on the sixteenth, at eleven, P.M., on the appearance of the premonitory symptoms, Artemisia was administered, and repeated in seventy-two hours. After each dose there was a profuse perspiration; after the first, at two, P.M., of the seventeenth, two violent epileptic attacks within one hour; on the morning after the second dose, increased urination of yellow unsedimentary urine. On the sixth of May, having had no further paroxysms, she was discharged.

In ten other cases, in which the Artemisia was tried, three were more or less rapidly cured; three were more or less improved, and four were unaffected by the remedy.—*Hufeland's Journal*, 58, 83

4. Wagner furnishes a case of a stout, active, healthy boy, about thirteen, who had convulsions when teething, and for three years had suffered from epilepsy, after a box on the ear, and whose affection had gradually increased, so that, for six months, he had had from six to eighteen paroxysms per day, besides three to five at night, varying in duration. There was now developed in him a propensity to steal, but subsequently his mental powers seemed gradually to become extinct, and with them the propensity disappeared. The resources of art, both scientific, domestic, and quackish, were exhausted, and the patient only grew worse, when a powder of Artemisia was administered on going to bed; during the night he had three paroxysms, and then fell into a very profuse, intolerable, stinking sweat; the same thing occurred after the second dose, given the next night, except that he had but one paroxysm, and none in the daytime. After the third dose, given on the third night, the sweats and paroxysms ceased, and the patient perfectly recovered his health, both of body and mind, for eight weeks, when slight epileptic attacks returned, which did not, however, seem to disturb his intellect. The Artemisia was again given, and was followed by the nocturnal sweat, which, as well as the perspiration in a warm room, smelt of garlic, and by a diminution in the number and violence of the attacks, which now took place only once or twice in the twenty-four hours. The Artemisia was continued, and accompanied by bleeding, and the attacks vanished; some weeks after, slight vertigo came on, which, two months afterwards, developed into chorea and mental derangement, in which state the patient remained.—*Hufeland's Journal*, vol. 59, p. 26; vol. 81, p. 115.

5. Van Maanen relates a case of a man, suffering from convulsions, occurring in the daytime, consequent upon fever and diarrhœa, in

which drachm-doses of *Artemisia* were followed by sweating, and seemed to have cured, after a previous course of violent and fruitless medication — *Hufeland's Journal*, 61, 64. — METCALFE.

6. Wolff gives a case of an official person, forty-two years old, who had had nocturnal epilepsy for a year and a half, recurring at intervals of from two to three months, without apparent cause, and who had not been benefitted by a treatment consisting of leeches to the anus, Kali-tart. and mineral-waters. A drachm of the powder of *Artemisia* root was given, for six nights in succession, and then three doses every other night, with the advice to continue the medication for two months. Fifteen months afterwards he had had no attack, and considered himself cured. — *Hufeland's Journal*, 62, 54.

7. Gitterman relates the case of a child, six months old, whose mother was healthy, but had suffered much from grief during her pregnancy, who had had convulsive paroxysms from four to six times a day for two months, attributable to no known cause. The attacks began by the infant turning up his eyes so that scarcely a trace of the cornea could be seen, and generally giving a piercing shriek, while, at the same instant, violent clonic spasms affected all the extremities, lasting ten minutes, and sometimes longer, ending in perfect relaxation, resembling paralysis, and followed by a sound sleep of half an hour or more, from which the child awoke well. These paroxysms were the only difficulty the child had, and were fruitlessly treated with emetics, cathartics, and nervines [!] (*Zinc.*, *Hyos.*, *Mosch*) *pulv. rad. Artem-vulg.*, *Sacch-alb.*, *aa. gr. v.* *Dent. d. t.* xij S, four times a day. Three days after, it had had only three paroxysms; six days after, only two, and much milder, and it was shortly entirely cured. — *Hufeland's Journal*, 62, 88. — METCALFE.

Bird records the case of a healthy man of sixty, who, after suffering for several years from great care and grief, was attacked with fainting-fits, generally towards evening, which finally degenerated into decided epilepsy. After employing many remedies in vain, *Artemisia* was administered, and the "frequent nocturnal epileptic paroxysms" disappeared. The patient still felt a faintness on any cause of vexation, which, however, seldom went further. — *Hufeland's Journal*, 65, 68

9. Löwenhard relates a case of epileptic convulsions, accompanied by irregular and deficient menstruation, in which *Artemisia* seems to have been of service. — *Hufeland's Journal*, 65, 81.

10. Geis gives the case of a young man, aged twenty, in whom an epileptic paroxysm had been excited two years before by a fright; six weeks after, another occurred from taking cold, and they continued to recur without special cause every three or four weeks, generally towards noon; came on more frequently, and, finally, as often as every other day, between nine and ten, A. M. Ten powders of *Artemisia-rad.* were administered, one at seven, A. M., before each threatened attack. After the first two, the paroxysms became weaker, and there remained only a troublesome stretching in the limbs, followed by las-

situde, which disappeared after the eighth powder. The first, second, and fifth to the eighth doses were succeeded by profuse sweat, the last having a fetid odor; the third, fourth, ninth, and tenth by less profuse and inodorous perspiration.—*Hufeland's Journal*, 65, 112.

11. Græfe became acquainted with this remedy in 1822, through a Major von Greifenberg, who had received it from a noble family in Pomerania, with whom it was a hereditary family secret. The roots, and especially the little radicles of the *Artemisia-vulgaris* were gathered in autumn, cleansed, dried in the air, and finely pulverized. A heaping coffeespoonful of this powder was directed to be given to the patient, immediately before or after the paroxysm, mixed with tepid beer; he went to bed, and, commonly in the course of an hour, broke out into a profuse perspiration, at the end of which he put on a dry and warm shirt. The remedy was repeated on the third and fifth day; if no attacks intervened, it was administered towards evening. If, after this, the paroxysms returned, the treatment was begun again. Græfe relates four cases: 1.—A young man of twenty had suffered from epilepsy for several years; the first attack was caused by fright, the subsequent ones came on spontaneously, without recognizable cause. He was completely cured by the *Artemisia*. 2.—A strong, powerful man, thirty-two years old, of fresh appearance and choleric temperament, had had epileptic attacks for many years, which came on particularly when he got angry, which, from the impetuosity of his disposition, often happened. He had an emetic, and the next day *Artemisia*, of which he took four ounces, and was cured. 3.—A lank, choleric man, forty-five years old, had frequent attacks of *catalepsy*, sometimes six or more times a day, and which were aggravated by passion. He had tried a great variety of remedies, but, on taking the *Artemisia*, the paroxysms suddenly ceased; they returned again, but with much less violence, and finally ceased altogether on the continued use of the drug. 4.—A slender woman, aged twenty-eight, of dry skin, and mother of several children, was attacked with *catalepsy* on hearing some frightful news. The attacks were of the following sort: She remained in the same position in which she was when they came on, and stared straight before her with fixed eyes; the only muscular movements were twitchings in the face; the eyes streamed water; respiration was entirely suspended, and, when she suddenly drew a deep breath, the attack was over; she was then obliged to sit down and recover herself, being very much exhausted. She had two attacks, of from three to five minutes duration, in half an hour, when she applied to Græfe; they were brought on particularly by bodily exertion, or by alluding to the disease. She was perfectly cured by taking *four ounces* of the *Artemisia* root.—*Journal für Chirurg.*, &c., Band 6, S. 360; Band 9, S. 460.

Chorea.—12. Giuterman relates a case of a delicate, scrofulous girl, ten years old, so severely afflicted with chorea that she could scarcely sit, and was obliged to be carefully held in a chair; walking was very difficult, and occasionally swallowing, so that her food es-

caped from her mouth, which was constantly filled with frothy mucus. She could hardly speak intelligibly.

With the exception that she was peevish and inclined to weep, she seemed mentally well, and had no bodily ailments, except the convulsive movements and occasional slight colicky pain. After *Belladonna*, *Zinc*, *Valerian*, *Cupr.-ammon.*, and other drugs were administered without benefit, *Artemisia* was given. In a few days the improvement was manifest, especially in the afternoon and at night, and in a fortnight she was well.—*Hufeland's Journal*, 62, 62.

13. Fritsch relates two cases of chorea: 1.—A delicate, irritable girl, aged ten, of developed intellect, was so severely affected with chorea that she was obliged to remain seated most of the time, and even be supported in that position, as the muscular twitchings were so violent as to throw her from the chair; she could, with difficulty, speak a few words. She was otherwise, mentally and bodily, well; slept well, and had no muscular motions at night. She was perfectly cured, within four weeks, by *pulv. rad. Artem.*, a teaspoonful every other night. 2.—A boy, aged twelve, who had had a mild chorea for eight days, whose spine exhibited nothing abnormal, and who was, in other respects, apparently perfectly well, took anthelmintics without any effect, except that of discharging a quantity of lumbrici. He was cured of the chorea by *Artemisia*.—*Hufeland's Journal*, 75, 113.

Somnambulism.—14. Bonorden gives a case of a tolerably robust, apparently perfectly healthy servant girl, aged sixteen, not yet menstruating, who, for a year and a half, had been in the habit of getting up in her sleep every night and attending to her daily avocations; then going to bed again, and the next morning remembering nothing of what had taken place. It was very difficult to arouse her from this sleep; every time it was forcibly done she was made quite ill by it. The disorder diminished gradually, under the use of *Artemisia* root, and wholly ceased in sixteen days.—*Rust's Magazine*, 18, 338.

Strangury.—15. Heun states that he cured a child, of an obstinate strangury, which had resisted various remedies, with an infusion of *Artemisia*, the child being also bathed in a decoction of the same.—*Rust's Magazine*, 22, 511.—METCALFE.

Epilepsy.—16. Hofmeister gives the case of a child, fourteen weeks old, who was cured of epileptic fits by the use of *Artemisia* for a fortnight; but injections of Chamomile tea and soap were simultaneously used.—*Zeitschr. für Natur und Heilkunde*, 6, 209.

17. Kuhn used the *Artemisia* in eight inveterate cases of epilepsy, in which the intellectual functions were very much disturbed, with no lasting good result; it produced, however, very profuse and fetid sweats.—*Zeitschr. für Nat. und Heilk.*, 5, 435.

18. Elliotson also administered the powdered *Artemisia* root to a girl of seventeen, who had had three or four epileptic fits every day for four months. After giving a drachm three times a day, for ten days, the dose was increased to two drachms, and subsequently was repeated every four hours. When she left the hospital, nearly two months after her admission, she had had no fit for twenty-six days.—*Lancet*, July 9, 1836.

ARSENICUM - IODATUM.

Iodide of Arsenic.

AUTHORITIES.—Wilson's Diseases of the Skin (75). Wood and Bache (7). Watson, of Utica (54).

GENERAL REMARKS.

This remedy has been successfully used by the celebrated Brett, as an external application in corroding, tubercular skin-diseases. Dr. A. S. Thompson used it internally, with advantage, in lepra, impetigo, and diseases resembling cancer. He employed it in the form of pills, commencing with one-tenth of a grain, and ending with one-third of a grain. (3.) The latter is the largest dose of this medicine that has ever been administered.

The following are its more obvious effects, as stated by Wilson, (see "Diseases of the Skin," American edition, p. 288): "Quickness and hardness of the pulse, with slight puffiness of the lower eyelids." The symptoms which indicate a necessity for reducing the dose are: Heat of the mouth and fauces, and anxiety at the præcordia, with pain at the epigastrium, or griping. If, besides these, there is tension, with an uneasy sensation of stiffness around the eyes, and erythema of the face, thirst, a white tongue, with the edges and tip of a florid red hue, and a quick pulse, the medicine should be suspended for some days. If nausea, cough, vertigo, or salivation supervene, it should be left off altogether. The employment of any arsenical medicine is inadmissible if it cause an uneasy sensation in the chest from the first. Iodide of Arsenic is incompatible with Cinchona in any form. (75.)

This remedy is the most serviceable that we have in the diarrhœa of phthisis. (54.)

LIQUOR ARSENICI ET HYDRARGYRI IODIDI.

DONOVAN'S SOLUTION.

Solution of Iodide of Arsenic and Mercury.

AUTHORITIES.—Wood and Bache (7). Watson, of Utica (54).

GENERAL REMARKS.

This remedy is said to have been found very useful in the treatment of various diseases of the skin, such as impetigo, lepra, ptyriasis, lupus, porrigo, psoriasis, and venereal eruptions, both papular and scaly. Some of these diseases, of years standing, have been cured by this remedy. Dr. E. J. Taylor, of New-York, in a communication

in the *American Journal of Medical Science*, new series, p. 319, states that it produces more marked and prompt effects than the remedies usually resorted to in the treatment of lupus, rupia, psoriasis, and secondary venereal. In two cases of uterine disease, characterized by patency of the os-uteri, and vascular turgescence of the cervix, and attended with lumbar and pelvic pains, Dr. Kirby, of Dublin, afforded relief by the use of the solution. The dose, in ordinary practice, is said to be from five to twenty drops, three times a day, given preferably in distilled water; but Dr. Taylor never exceeded the dose of five drops, three times a day. Sometimes the medicine deranges the stomach, confines the bowels, and produces headache, giddiness, and confusion of mind. When these effects are produced, it must be laid aside for an interval varying from ten days to three weeks. It has produced moderate salivation. The treatment sometimes requires to be persevered in for several months. By some practitioners, the solution, diluted with an equal bulk of water, has been used with advantage as an external application to the ulcers or eruptions, at the same time that the medicine was given internally. (7.)

Wood says it is prepared by dissolving thirty-five grains of Iodide of Arsenic, and the same quantity of Red Iodide of Mercury, in half a pint of distilled water.

The object of this preparation is said to be to obtain the conjoined effects of the three powerful alteratives, Mercury, Arsenic, and Iodine. It is chiefly employed, in the dominant practice, in obstinate skin-diseases, in which, it is said, it has proved highly successful. It should only be used in very small doses, though it often has to be given for a long time. Wood suggests that the separate exhibition of these energetic medicines may answer an equally good purpose, without being liable to the same objection; for, if one ingredient disagrees, all have to be withdrawn. There is some force in this suggestion, but the use of the compound is otherwise not more objectionable, theoretically, than Hepar-sulphur, which is a compound of Lime and Sulphur. (11.)

ARLANTHE-ELONGATA.

Matico

AUTHORITIES.—Wood and Bache (7). Pereira (3).

GENERAL REMARKS.

It has been crudely decided to be an aromatic, tonic stimulant, and aphrodisiac, with a special tendency to the urinary organs.

Matico has been used (like lint, felt, cobweb, &c.) as a topical application, for staunching blood from slight cuts and other wounds, leech-bites, bleeding from the gums, nose, &c. It then acts me-

chanically, as a styptic, by the structure of its leaf, which divides the blood and promotes its coagulation. Dr. Ruschenberger, U. S. Navy, introduced it into the practice of this country. He has used it locally, in chronic ophthalmia, with advantage. With regard to its anti-hæmorrhagic power, he states that he applied it to arrest hæmorrhage, after an operation upon the side of the neck below the angle of the jaw, in which there was considerable bleeding and difficulty in taking up the divided vessels, owing to induration of the part from chronic inflammation, and the application was successful. (3.) It has been prescribed by Dr. Jeffreys, of Liverpool, with advantage, in diseases of the mucous membranes, as gonorrhœa, leucorrhœa, menorrhægia, catarrh of the bladder, hæmorrhoids, and epistaxis. It is said to prove useful in dysentery, hæmaturia, and hæmoptysis. (7.) In hæmatemesis and metrorrhagia it is regarded by some as a most valuable remedy. In both diseases, the powder may be applied directly to the bleeding surfaces; it operates mechanically, and arrests the hæmorrhage with the same facility that it does when applied to wounds on the external surface of the body. In metrorrhagia we have seen it succeed in a most obstinate case of several weeks standing, produced by miscarriage at four months. The case had resisted the tampon and other appropriate remedies, but yielded readily to the infusion of Matico, administered internally, and the sponge-tampon, soaked with the same preparation, and locally applied. The anti-hæmorrhagic power of the *Arlanthe* is undoubtedly its most remarkable property, and this is best evinced when it can be locally applied, so as to secure the mechanical effect. (54.) G. B. Wood says Matico agrees with Pepper and Cubebs in its botanical affinities, and, to a considerable degree, in its effects. The medicine, as imported, consists of dried leaves, spikes, and stalks, mixed together, and closely flattened by pressure. They have an agreeable aromatic odor, and a strong spicy taste. Matico has long been used in Peru, externally, as a styptic in hæmorrhage, and a stimulant to ulcers; and internally as an aphrodisiac, and in venereal diseases. Its effects on the system are said to be those of an aromatic tonic and stimulant, bearing no inconsiderable resemblance to those of Pepper and Cubebs. Although it possesses styptic properties, it is said to be quite destitute of astringency, and Wood supposes that it relieves some internal hæmorrhages by an influence similar to that of oil of Turpentine, which is often an efficient remedy in hæmorrhage. As a local styptic, he says, it has been highly recommended, and thinks it acts mechanically, by absorbing the blood and favoring its coagulation. (11.)

A R U M - T R Y P H I L L U M .

*Dragon Root. Jack in the Pulpit. Wake Robin.
Indian Turnip.*

AUTHORITIES.—Wood and Bache (7). King's Dispensatory (100).

GENERAL REMARKS.

It has been crudely decided to be an acrid, expectorant, and diaphoretic remedy. It has been recommended in flatulence, asthma, pertussis, chronic catarrh, and chronic rheumatism, bronchitis, pains in the chest, aphthous sore mouth, colic, low stage of typhus, and various affections connected with a cachectic state of the system. (7.) Externally, it has been used in scrofulous tumors, tinea-capitis, and cutaneous diseases. (100.) This remedy is probably similar to Cayenne Pepper and Calamus in its action. Its peculiar or specific properties, if it possess any very decided ones, have not been very decidedly elucidated by any author. (11.)

A S A R U M - C A N A D E N S E .

Canada Snake-Root or Wild Ginger.

AUTHORITIES.—Wood's Pharmacology (7.)

GENERAL REMARKS.

This and many other remedies are merely superficially treated of, because their specific virtues are not very great, and are not omitted altogether, simply because every soundly-educated physician should be somewhat acquainted with as many articles of the materia medica as possible, and should be entirely ignorant of as few as may be. (11.)

All parts of this plant have an agreeable aromatic odor; its taste is aromatic, bitterish, and grateful, bearing some resemblance to that of Cardamon. Wood decrees it to be a stimulant aromatic, with tonic and diaphoretic properties, somewhat analogous to *Serpentaria* in its operation, but with less of the characteristic effects of the simple bitters than of the general stimulants and aromatic tonics. He says it may be used as a gentle stimulant and diaphoretic in low fevers, but should be more disposed to employ it for the same purposes as *Ginger*, for which the country people are said occasionally to substitute it. *Ginger* is decreed to be a very grateful stomachic stimulant, and one of the most useful of the aromatics. In *pure dyspepsia* it is often

used with much benefit; in the feeble condition of the digestive organs attendant on *atonic gout*, it is said to be an excellent adjuvant to other measures. It is thought to be one of the best carminatives, and, in the form of hot infusion, it is much employed in domestic practice, in simple, spasmodic, and *flatulent colic*, especially in children. As a *preventive of cholera*, its cordial influence upon the digestive organs is thought to render it peculiarly appropriate, and, in the epidemics of this complaint, it has been among the prophylactic medicines most relied upon. Well mixed with twice its quantity of good brown sugar, and added to a tumbler of ice water, it forms a good summer drink, in places where the water is bad and apt to cause diarrhœa. It is preferable to brandy and water, as it is more tonic, or, of course, less stimulating and intoxicating. (11.)

The Wild Ginger, Wood thinks, would make an elegant tincture, to be added as an adjuvant to less agreeable tonic and purgative infusions.

ASARUM - EUROPÆUM.

Asarabacca.

AUTHORITIES.—King's Dispensatory (100). Watson, of Utica (54). Dierbach's *Materia Medica*. Jahr (32). Sobernheim. Peters (11).

GENERAL REMARKS.

It is generally said to be a purely acrid remedy, powerfully emetic and cathartic in its operation, with errhine properties. It is used, in the dominant school, chiefly as an errhine in headaches, chronic ophthalmia, rheumatic and paralytic affections of the face, mouth, and throat. In France, it is said to be in common use by drunkards, to produce vomiting. (100, 54.)

It is placed among the Aristolochiacæ, with *Aristoloch.-serpent*. The oil has an acrid, burning taste, and a penetrating, Valerian-like odor. Every part of the plant possesses acrid properties; applied to the nose it excites sneezing, profuse flow of mucus, and even a discharge of blood. Internally it causes vomiting, purging, and griping pains; also is said to possess diuretic and diaphoretic powers.

It is principally used as a vomit and errhine. Emetic dose, one-half to one drachm. Errhine, one or two grains of the root. It is the basis of many cephalic snuffs.

Dierbach places it among the emmenagogue or uterine remedies, in company with *Sabina*, *Taxus-baccata*, *Laurus-nobilis*, *Ruta*, *Buchu*, *Secale*, and *Borax*. (11.)

According to Berchtold, *Asarum* is regarded, in Bohemia, as one of the most popular and active abortion-remedies; as such it is also known in England, and H. Hoffmann cautions pregnant women from

using it. The fresh root, and still more the leaves, often excite vomiting and diarrhœa; a strong decoction generally acts as a purgative. The dried plant, when several years old, exhibits more of a diuretic and diaphoretic power. Several grains, put in the nostrils, occasion a profuse secretion of mucus, often mixed with blood, and not always attended with sneezing.

USES.—It has been used in menostasia, dropsy, fever and ague, and obstinate gout; still it is more frequently used as a vomit and errhine. The ordinary dose is one-half to two grains. To vomit, two scruples are often given, in divided doses. It is but little used now, but deserves to be further examined into.

Its action as emmenagogue and diuretic was known to the ancients, by whom, however, it was mostly used in dropsy, but also in some liver-affections, viz., jaundice; and against stone and gravel-affections. Hieronymus Tragus, as early as the sixteenth century, spoke of its emetic and abortion-powers. Sobernheim places it among the acriapura. (11.)

This is not a very badly-proven remedy, the effects of which are not very indistinctly portrayed; but most physicians scarcely know how to use it, and there is but little clinical experience with it; still the huge mass of trivial symptoms, which encumber this and many of our records, are even more wearisome and disgusting than the bald generalities in which regular physicians indulge. (11.)

Noack, however, recommends it in cases of great irritability of the nervous system; in megrim and periodical headaches; in many affections of the eyes, such as, ophthalmia, amblyopia, amaurosis, and some painful conditions remaining after operations upon the eyes; in inflammations of the ears and hardness of hearing; in some gastric and bilious conditions, such as excessive vomiting, colic and vomiting; lientery, helminthiasis, especially when ascarides are present; when there is great torpor and chilliness of the system; in fever and ague, when marked by partial chilliness, and partial heat of single parts, with external heat and internal chilliness, or with alternate heat and chills. It has been proposed as a remedy for the chills, heat, flushings, and perspirations which render the change of life in women so disagreeable;—although an allied remedy, *Sanguinaria-canadensis* has been used more frequently, and perhaps more successfully. (11.)

Nervous System.—It acts both on the motor and sensor nerves. Noack recommends it in cases of great irritability of the nervous system, and excessive sensitiveness of all the nerves, so that the slightest noise or scratching produces the most disagreeable sensation. In this respect, it somewhat resembles *Agaricus* (see page 161), which produces excessive sensitiveness to all external impressions, great tenderness of the skin, and a state in which the slightest exertion of the will produces the most violent effects upon the over-sensitive nerves and muscles, calling forth the most strange, and almost imaginary agility of the limbs, and extreme facility in the perform-

ance of the most fantastic motions. *Asarum* is also homœopathic to some mild kinds of chorea, in which there are twitchings of the eyelids, muscles of the neck and limbs; in this respect, and in its relation to worms, it resembles *Spigelia*. (11.)

Vascular System.—Its action upon the heart and arteries is not very evident; but, like all acrid remedies, it exerts more or less influence over the capillary vascular system. It has been recommended in some forms of fever and ague, in gastric fevers, slow typhus, in which the symptoms are not very urgent at first, but are always obstinate, and frequently become malignant in the end; in hectic fever, especially against the pleuritic pains, tightness and soreness of the chest, night-sweats and diarrhœa; also against the diarrhœa of typhoid fever. (11.)

Fevers.—It is thought to be indicated when there is much more coldness than heat, or, rather, when the cold stage of fevers is long and obstinate, the hot stage short and slight, and the sweats profuse;—when there is shivering, with nausea; uninterrupted chilliness; coldness of the hands and face, and blueness of the face; icy coldness of the hands, and violent chills; *shaking chills* in the evening, with extreme languor, and pains in the limbs, knees, and small of the back, without thirst; chilliness the whole day; the slightest exposure producing excessive chilliness. It is peculiar that the *Ignatia*-chills, which otherwise resemble those of *Asarum*, are attended with excessive thirst, while those of *Asarum*, like those of *Pulsatilla*, are marked by scarcely any thirst. Double-chills, first in the morning, then again in the evening; fever, intermixed with chills. (11.)

Membranes and Tissues.—It is supposed to act both on the mucous and serous membranes, which is rather unusual, as the mucous and serous remedies are frequently antagonistic to each other;—thus, *Bryonia*, which acts upon the serous membranes, is a natural antagonist of *Pulsatilla*, which acts predominantly upon the mucous tissues; still, both of them, like *Asarum*, act upon the muscular tissues, but not on the motor nerves; they affect the ganglionic operations of the muscular tissue, i. e. the vascular, reproductive, or formative and disintegrating processes, but do not so much control the spinal or motor operations of the muscular parts, like *Conium*, *Angustina*, *Nux-vomica*, *Ignatia*, &c. (11.)

The action of *Asarum* on the *mucous* tissues is marked by mucous discharges and accumulations from the nose, stomach, and bowels; its effects upon the *serous* tissues are characterized by the production of various pleuritic pains; while its influence upon the *muscular* system is shadowed forth by the excitation of twitchings in various muscles, especially of the eyelids, neck, and limbs. (11.)

Mind.—It has been recommended when there is great nervous irritation, followed by melancholic ill humor, alternating with great cheerfulness, which is, however, interrupted every hour, to be succeeded by a melancholic and gloomy mood. (11.)

Brain.—It has been thought of in some of the troubles of literary men, or those arising from over-use of the brain, especially when the patient feels quite stupid and not disposed to do anything, with inability to accomplish any kind of work, or only in a very awkward manner, for his mental faculties fail him, as if he were about falling into a rever-y, or even into a sleep, with gradual vanishing of his ideas. It is also more or less indicated against exhaustion of the brain and nervous system, with or without congestion of the head; when there is a dullness or stupid condition of the whole head, with tension in the region of the ears; dizziness and drowsiness of the head, early in the morning, with headache, like sick-headache, in the *left* side of the forehead; or headache and dull feeling in the left temple; afterwards in the region below the left parietal bone; and, finally, in the left side of the occiput. It may prove useful against some of the distressing headaches, and confusions and congestions of the head which remain after severe attacks of fever and ague, in persons who have over-taxed their brains, especially when any attempt at mental labor is followed by increase of pains in the head, and inclination to vomit; or by such confusion of mind and dizziness of head that one has to cease thinking immediately. (11.)

Head.—We suggest it as a useful remedy in congestive headaches, and those attended with passive fullness or stagnation of blood in the brain and its membranes, when there is a painful tightness and dullness of the head, with weight and pressure on the sagittal suture, as if one had been intoxicated; weight in the head, as if some loose body were in it which presses in the direction the head is bent, either forwards, backwards, or sideways. The above is often a reactionary symptom, following after great fullness of the head, which, when it has subsided, leaves the brain unusually bloodless or anæmic, and so little compressed or sustained by moderately turgid blood-vessels that the brain actually seems to have room to move or gently fall about within the cranium. (11.)

It is supposed to be homœopathic to intense compressive headache in the left temple and behind the ears, increased by walking, jarring, or shaking the head, and somewhat relieved by keeping very quiet; this is a variety of headache which is very apt to remain after severe attacks of fever and ague, when attended with great congestion of the head. Asarabacca is still more indicated when there is congestive pressure over the greater portion of the brain, from within outwards; pressure in the top of the head, as if from a stone; violent pressure in the forehead, extending down to the eyes, which then begin to water; violent drawing pressure in the forehead, much increased when straining to vomit; throbbing pain in the forehead, early in the morning, increased or excited by stooping; heavy pulsation of the arteries in the occiput, which gradually extends over the whole body.

In its effects upon the head and brain it seems to have some similarity with those of *Nux-vomica*, *Anacardium*, *Ignatia*, and *Aurum*. (11.)

Eyes.—We suggest it in some irritations and nervous conditions of the eyes, especially when they are kept up by more or less chronic conjunctivitis; such as nervous- or irritative-, involuntary and frequently-repeated twitchings of the lids, and in nervous and incessant winkings, which form so disagreeable and annoying a habit in many young children, especially in those troubled with worms, or slight but obstinate forms of chronic conjunctivitis. It may be given in weakness or sensitiveness of the eyes, or morbid sensibility of the retina, when reading very quickly fatigues the eye. It may also be thought of when there is a very dry and sandy condition of the eyes, with dryness or sensation of dryness and burning in the eyelids, almost as annoying as if occasioned by the application of brandy; painful feeling of dryness in the eyes, with more or less redness of the conjunctiva, relieved by cool applications, while warmth, sunshine, light, and wind are intolerable. In eye-affections it may sometimes be given with advantage, in alternation with *Spigelia* or *Agaricus*. (11.)

It has also been given in *gastric and abdominal headaches*, when there was nausea, with aching in the forehead, and flow of much water in the mouth; or nausea, increased by reflection; or, increase of all the symptoms, except of the diminishing dullness of the head while vomiting; *vomiting, with violent compressing together in the epigastric region, and a like sensation in the head*. Qualmishness in the abdomen, with repeated aching head-pains in the coronal suture; violent drawing pain in the brain, under the forehead, increased by every retching to vomit. (11.)

Before leaving this subject, we may be allowed to make a few diagnostic remarks on twitchings of the lids. These sometimes arise from over-irritation, and consequent exhaustion of the lids, occurring from excessive use of the eyes, long-continued watching, or from excessive sensitiveness to light. Sometimes it occurs as a sign of having taken cold, and is a precursor of an attack of cold in the head or rheumatic inflammation of the eyes. But, very frequently also, twitching and trembling of the lids is a sign of greatly increased sensitiveness of the whole nervous system, and is not an uncommon occurrence in nervous and hysterical subjects. It sometimes precedes and accompanies attacks of Fothergillian neuralgia of the face; or it may attend worm-affections and some few disorders of the liver, especially in hypochondriacal subjects. It sometimes precedes dangerous metastases to the brain on the retrocession of some eruptions, such as miliaria; while, in fever-patients, it is either a sign of acute irritation of the brain or of the setting in of a nervous and exhausted condition. Tissot frequently noticed this sign, in fevers, to precede a symptomatic inflammation of the brain, which was then generally followed by the most intense delirium or coma. In children, as has frequently been said before, frequent winkings and involuntary twitchings of the lids is often a sign of worms or of excessive nervousness. In typhus-fever patients it often precedes an attack of delirium. (11.)

Our readers will remember, in this connection, that Noack has al-

ready recommended *Asarum-europæum* in cases of great irritability of the nervous system and against worms, especially *ascarides*. (11.)

Ears.—It may be used against some of the affections of the ear, caused by the excessive use of Quinine, or remaining after attacks of fever or congestion of the brain, or arising from inflammatory irritation of the meatus or tympanum. Among the ear-symptoms produced by it, are: *heat of the external ear*, especially the right, and this is said to have returned frequently during the whole proving. Increased heat of the ears, if it does not arise from a local affection, is generally regarded as a sign of congestion to the head; but burning heat of the ears, according to Küttner, even when not attended with remarkable redness, is very apt to occur after taking cold, especially when the feet have been chilled, and hence is sometimes the precursor of a catarrh of the head. (11.)

It may remove dull roaring or shrill singing sounds in the ear, attended with or without pain and heat in the ears and dullness of hearing. (11.)

It is supposed to have a peculiar relation to a feeling of pressure and stoppage of the ears, as if a thin pellicle were laid across them, or as if they were closed with the hands, or as if the ears were stopped up with cotton, or the walls of the meatus were thicker and nearer together, or as if the meatus itself were smaller and narrower, or as if both ears were stopped up in front, constantly accompanied with sensations of tension and pressure, lasting for seven days or more. (11.)

Face.—It does not seem to exert any very specific action on this part. It has been used against an unusually persistent warm feeling in the cheek, and pains and pushes, as if with a pointed instrument, in the nerves and teeth; still there is no clinical experience with it, either in facial neuralgia or toothache. (11.)

Nose.—Although it is an errhine, it is not known whether it exerts any specific action upon the nose.

Mouth.—The effects upon this part are those of an ordinary acrid remedy, like Cayenne Pepper, Horse-radish, Hartshorn, &c. It causes smarting and burning in the mouth, with accumulation of much cool and watery, or burning, hot, and tenacious saliva, with white-coated tongue and sweetish mucus in the mouth and throat. It is not known whether it has ever been used against mercurial salivation or any other special affection of the mouth. (11.)

Taste and Appetite.—Feeling as if the stomach were deranged, with bitter taste of bread and tobacco.

Pharynx.—The effects on this part are simply those of a decidedly acrid remedy; such as dryness and rawness of the throat and difficult and painful swallowing. It promises to be useful when there is tough mucus in the throat, which cannot be raised for many days.

Gastric Symptoms.—It has been suggested in dyspeptic affections, arising from excessive irritation or inflammation, in very small doses, and in derangements of the digestion, proceeding from an anæmic, torpid, and debilitated state of the stomach, in rather large doses. It is supposed to be most indicated when there is much hiccough, with putrid and sour eructations and heartburn, with or without belchings, and gulping up of wind by the hour; also, when there are frequent and excessive retchings, with violent vomiting, by which only a small quantity of greenish, sourish water is thrown up; also, when there is vomiting, with great anguish, excessive straining, sense of suffocation, and feeling as if the head would burst; also, when there is violent vomiting and diarrhœa, approaching in severity to that of cholérine or Asiatic cholera. It has also been suggested in cardialgia, and when there was great irritation or an excess of mucus in the stomach, marked by fullness and hard pressure in the stomach, for several days in succession. (11.)

Abdomen.—It may prove useful when there is soreness and sense of excoriation in the region of the spleen. In colics, from flatulence or excess of mucus in the bowels, even when there is excessive colic and vomiting, or sharp, cutting pains in various parts of the epigastric region, abating after the emission of flatulence or shifting about of wind. It is also useful in gastric headaches, when there is qualmishness in the stomach and bowels, attended with repeated attacks of oppressive headache along the top of the head. (11.)

Stools.—It has been suggested in diarrhœa, dysentery, lientery, prolapsus of the rectum, ulcerations of the bowels, with diarrhœa, hectic fever, and discharges of thick black blood. The stools may be attended with cutting pains in the bowels and rectum; they may consist of hard, small pieces, like scybalæ, or of yellow mucus in long strings, or of masses, like resin, and consisting of tenacious mucus, or of shaggy masses of mucus, for six or more days, with or without tenesmus and discharge of white and bloody mucus. (11.)

It is also recommended in *lientery* by Noack and Trinks, when there are whitish-grey and ash-colored stools and bilious fæces; still it was used by the ancients in jaundice, and other bilious affections, when there were tough, slimy, diarrhœic stools, with or without blood; or diarrhœic stools, with undigested food, especially potatoes, and discharge of white, tough, bloody mucus. (11.)

Küttner advances the following suggestions about lientery: 1. Undigested stools—occurring soon after eating and drinking, often half unconsciously, or even quite involuntarily, with griping—may arise from simple severe irritation of the bowels, as from acrid purgatives, &c. (11.)

2. Simple *mucous flux* of the bowels is often attended by a quick, almost involuntary discharge of food and drink, intermixed with much mucus.

3. Undigested stools, in which the food, at first, passes off but little

changed, but afterwards, as the ejected food becomes black, discolored, bad-smelling, or mixed with bile, mucus, or also with blood, and attended with weakness and fever—points to softening, ulceration, or degeneration of the gastro-intestinal mucous membrane, or of the intestinal or mesenteric glands, or of the liver, spleen, or pancreas.

4 An habitual discharge, consisting in part, at least, of indigested food, and occurring more quickly than natural, may depend upon dilatation of the pylorus or a direct communication between the stomach and colon.

5. Undigested stools, still not following very quickly after each repast, and intermixed with actual fæces, may depend upon simple weakness of the digestive organs, or thinness of the bile or gastric juice, or weakness induced by long-continued diarrhœas, &c., or by excesses in eating or drinking, or by profuse suppuration, even in distant parts.

6. In adults, the more undigested the food, especially when mixed with a gelatinous whitish mucus, the more unfavorable the prognosis.

7. Undigested stools, in aged persons, is a sign of great debility of the digestive organs.

8. In children, on account of their slender powers of digestion, it is not an uncommon phenomenon, and may follow every profuse and persistent diarrhœa; hence, it is not often of much importance. It is frequent during teething, and also in confluent and descending aphthæ.

9. Inflammations of the chest, bowels, and mesenteric glands may be attended by it;

10. And it is common in rachitic children. Jahr mentions China and Ferrum, also Arsenicum, Bryonia, and Nux, as the principal remedies against lientery; also Arn., Asarum, Calc., Cham., Con., Lach., Merc., Nit.-ac., Nux-mos., Oleander, Phos., Phos.-ac., Squills, and Sulph. (11.)

China is thought most indicated when there are undigested stools, especially at night, or immediately after eating, with evacuation of everything eaten. It has cured lientery, but old-school doctors say that it is only indicated in lientery from debility. (11.)

Ferrum is thought useful against undigested stools, which it has cured. It is almost specific in ascarides and against some kinds of slimy stools; is said to be best suited when lientery is brought on by the debility caused by a blenorrhœa of the bowels, induced by ascarides. The old school give it as a tonic. (11.)

Arsenicum is recommended when there are undigested stools, with masses resembling undigested tallow, intermixed with tendinous parts. It is homœopathic to lientery from violent irritation, inflammation, or ulceration of the bowels. The old school say it acts as a tonic or alterative. (11.)

Bryonia is suggested when there are undigested stools. It is a drastic cathartic, and is homœopathic to those lienteries which arise from excessive irritation of the bowels. (11.)

Nux-vomica has also been used against undigested stools, and is

thought to be homœopathic to lientery arising from too rapid peristaltic action of the stomach and bowels. (11.)

Arnica is thought to be a remedy for some cases of undigested stools. Dierbach says *Arnica* quickly attacks the *prima-viæ*, causing eructations, stomach-ache, retching, nausea, vomiting, cutting pains in the abdomen, tenesmus, also diarrhœa, but more frequently constipation; hence, it is most homœopathic in lientery from irritation.

Calcarea is recommended against lientery and undigested stools, both when they are hard and costive, or thin and diarrhœic, and when there are pap-like stools, with undigested food, in the evening after eating, preceded by griping, as if wind or loose fæces would pass; *gruel-like stools with undigested food*. (11.)

Chamomilla has also some reputation in correcting undigested stools.

Conium has been used when there is a discharge of undigested particles with the stools; discharges of undigested food, with griping in the stomach and bowels. (11.)

Nitric-acid has cured some forms of indigestion when there were undigested fæces.

Nutmeg has also been suggested as a remedy. Pereira says it is a carminative, useful in mild diarrhœas, and often uses it as a substitute for Opium. It is a narcotic, as two drachms have produced stupor.

Oleander has been used against undigested discharges of food which was eaten the evening before.

Phosphorus, the old school say, acts as a stimulant in lientery from debility.

Scilla-marit. is said to cause offensive stools, with hot urine and discharge of undigested food. Purging is not unfrequently produced by it, and, when given in excessive doses, purging, pain, griping, and inflammation of the bowels have occurred. As Squills is more of an emetic or stomach-remedy than a purgative or bowel-remedy, it may be best in those cases which depend upon an affection of the stomach.

Urinary Organs.—*Asarum* sometimes causes irritation of these parts, which may be almost as severe as that caused by *Cantharides*; it may induce pressure on the bladder, with constant desire to urinate; raging, intense pains in the groins, darting through the urethra into the glans, and persisting there for a long time. (11.)

Female Sexual Organs.—As before stated, it has been used to cause miscarriage and abortion. It seems to excite menorrhagia, in which the menses come on too soon, last too long, with the blood very black. It has some reputation against the removal of intense lumbar-pains at the time of the menses, even when they are so severe that the patient can hardly get her breath. (11.)

Larynx and Trachea.—Noack suggests its use in some affections of the chest and air-tubes, in many catarrhal and asthmatic affections, and a few most troublesome coughs, even whooping-cough, more especially when frequent attacks of coughing are excited by mucus in

the chest, which rises into the throat, causes difficulty of breathing, and is expelled with difficulty; also when the throat feels constricted, and the patient is frequently attacked with oppressed breathing, and a short, hacking cough, which may be excited by simple inspiration, the throat and air-tubes being excessively sensitive. (11.)

Chest.—It has been recommended, and should be used more frequently in rheumatic and pleuritic pains about the chest, in chronic inflammatory affections of the lungs, and, perhaps, in petechiæ and spasmodic asthma. The chest-symptoms caused by it are well-marked and very peculiar. It is indicated when there are sharp or dull stitches in one or both lungs, for eight days or more, increased by inspiration, rendering the breathing short and jerking, with a dry, hacking cough; burning and constrictive sensations, not only in the chest, but in the lungs themselves, as if a sharp wire was twisted around them, and was cutting them through. (11.)

It should be used in hectic fevers and chronic pleuro-pneumonias more frequently than it is, and should do away with much of the routine-treatment of pleuritic pains with the everlasting *Bryonia*, and hardly less hackneyed *Arnica*, *Cannabis*, *Sulphur*, and *Ranunculus*.

Back.—It may be thought of in some muscular pains of the back, especially when there are burning pains in the small of the back, or across the loins, from the brim of one pelvis to the other, as if the flesh were torn or pulled; or when there is a painful lameness in the back, as if bruised, both in the small of the back and about the shoulder-blades; when there is pain in the back and nape of the neck, as if a bundle of muscular fibres had been strained by violent exertions, extending over the trapezius muscle to the head and shoulders; or, painful lameness of the muscles of the nape, as if bruised. It has also been suggested in stiff-neck, when there is a feeling in the muscles of the neck as if a cravat were tied around them too tightly; or, spasmodic contraction of the cervical muscles, with evident flexion of the head to one side. It may prove useful in some of the muscular affections so graphically described by Inman. (11.)

Superior Extremities.—It does not seem adapted to many affections of these parts. It may be thought of when there is pain in the shoulder, when moving it, as from a sprain; also pain in the deltoid muscle, with lameness of the arm, some pains in the wrists, &c. It may be kept in mind when the hands and feet are very cold, and the head, face, and ears quite hot. (11.)

Inferior Extremities.—It may be thought of in some of the accompanying affections of hip-disease; also in the pains in the *left* side, and in one or other of the joints, especially the knee-joints, which occur so frequently and persist so obstinately in many nervous and hysterical females, giving rise to fears of consumption or pleurisy, conjoined with joint-disease. It may be used when there is pain,

either dull or pressing, or drawing in the hip-joint, with tenderness on pressure, and increase of pain from walking or moving; when there is such a violent pain in the hip-joint from walking that the patient cannot put his foot to the ground. (11.)

It has also been suggested against the languor, weariness, and pains in the legs and back, such as are felt in the beginning of fever and ague. (11.)

It has some claims to consideration in *chorea*, when there are spasmodic contractions of the muscles of the neck and of the thighs, with visible twitchings and jactitations of the gastrionemic muscles, and twitchings of the eyelids. Also against that *excessive sensitiveness* of the nerves which attends chorea and other nervous affections, so that the slightest noise or scratching produces the most disagreeable sensations. (11.)

ASCLEPIAS-CURASSAVICA.

Bastard Ipecacuanha. Red-head. Blood Weed.

AUTHORITIES.—Wood and Bache (7). Watson, of Utica (54).

GENERAL REMARKS.

This is a very pretty species of *Asclepias*, from one to three feet high, and bearing hundreds of bright red flowers. It is a native of the West Indies, abounding especially in the islands of Nevis and St. Kitts, where it is considerably used as a medicine. Both the root and the expressed juice are emetic; the former in the dose of one or two scruples, the latter in that of a fluid-ounce or more. They are also cathartic in somewhat smaller doses, and the expressed juice, made into a syrup with sugar, has been strongly recommended as a remedy for worms; the medicine, however, is somewhat uncertain in its operation. According to Dr. W. Hamilton, it may also be usefully employed in arresting hæmorrhages, and in the treatment of obstinate gonorrhœa, in which it has been found very efficient by Dr. Bacham.

ASCLEPIAS-INCARNATA.

Swamp Milkweed.

AUTHORITIES.—King's Dispensatory (100). Watson, of Utica (54.)

GENERAL REMARKS.

Reported to be emetic, cathartic, and anthelmintic. For the last purpose, the powder of the root has been employed, in doses of ten to twenty grains per day. Dr. Tully, of New-Haven, has found it

useful in catarrh, asthma, syphilis, rheumatism, and worms. Dr. Fowler, of New-York, speaks in the most unequivocal terms of its virtues in amenorrhœa, and says that it is capable of producing abortion in comparatively small doses, i. e., from two to three drops twice a day. He states that it is in common use, among women of a certain class, for this purpose; and, in a case which came under his own observation, it had been used seven times with this view, and each time with success. Dr. Fowler had given it in one case of pregnancy, in a woman with deformed pelvis, with complete success; he gave it in three-drop doses, and, in twelve or sixteen hours, labor-pains were induced, which resulted in a satisfactory expulsion of the uterine contents within forty-eight hours, without subsequent ill consequences. He has also prescribed *Asclepias* in many cases of amenorrhœa, with uniform success. Dr. A. C. Jones, of Philadelphia, has given it in several cases of suppressed menstruation, without benefit. Dr. Hale, of Michigan, thinks it is the *Asclepias-syriaca* which is so useful in amenorrhœa, and not the *Asclepias-incarnata*.

ASCLEPIAS - SYRIACA.

Common Milkweed.

AUTHORITIES.—King's Dispensatory (100). Watson, of Utica (54.)

GENERAL REMARKS.

It is crudely decreed to be anodyne, emmenagogue, diuretic, and alterative, and thought useful in amenorrhœa, dropsy, retention of urine, dyspepsia, asthma, cough, dyspnœa; also in scrofulous and rheumatic disorders. (54.)

Asclepione, obtained from the above, and doubtless possessing the same properties, is *white*, *tasteless*, and *inodorous*.

ASCLEPIAS - TUBEROSA.

Butterfly Weed. Pleurisy Root. White Root, &c.

AUTHORITIES.—King's Dispensatory (100). Watson, of Utica (54.)

GENERAL REMARKS.

It is said to be diaphoretic and expectorant, without being stimulant; in large doses, often cathartic. It is thought, by the botanic doctors, to be a valuable article, acting prominently on the cutaneous system, stimulating the capillary circulation, promoting diaphoresis, expec-

